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BULLETIN, 1914, NO. 30 - - - - - WHOLE NUMBER 604

CONSOLIDATION OF RURAL SCHOOLS
AND
TRANSPORTATION OF PUPILS
AT PUBLIC EXPENSE

By A. C. MONAHAN
BUREAU OF EDUCATION



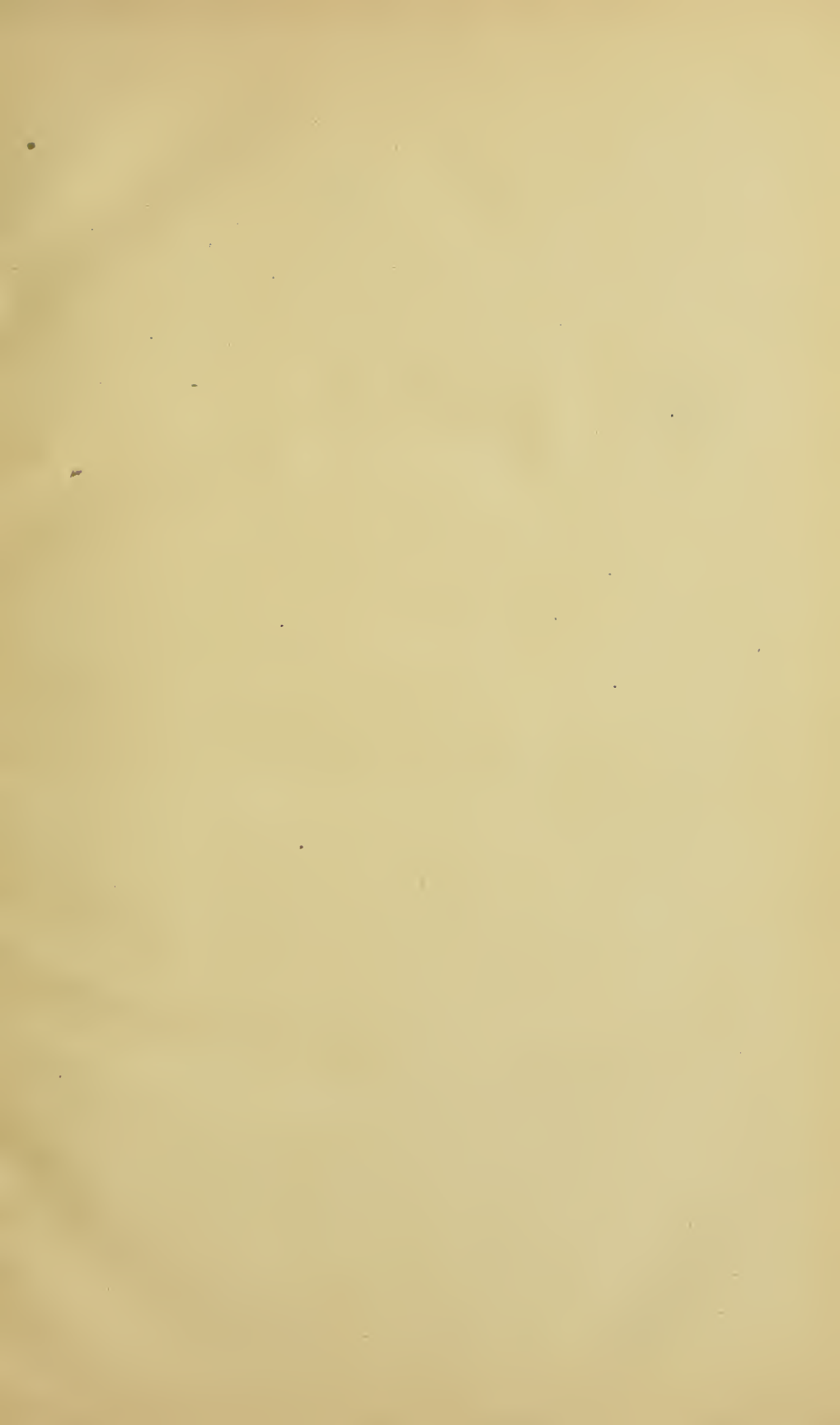
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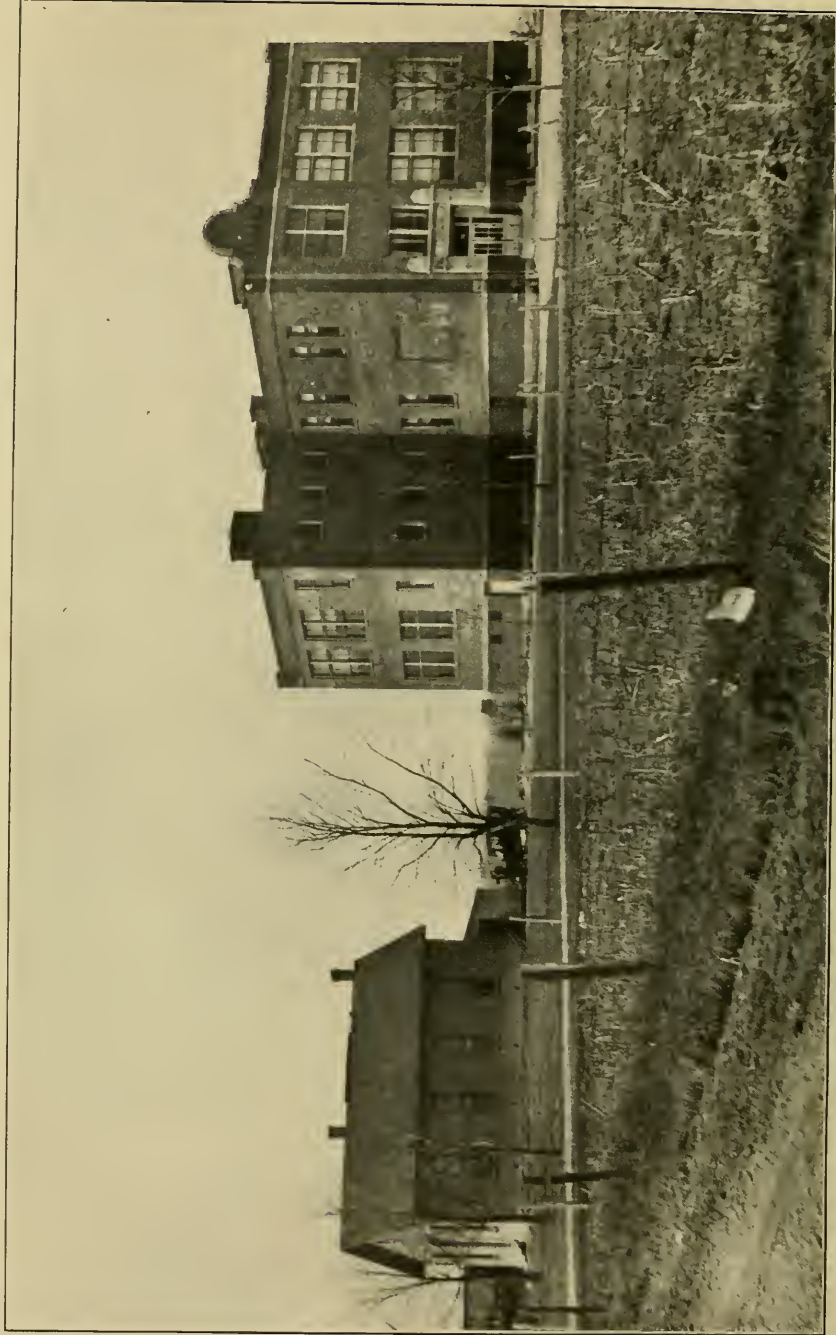
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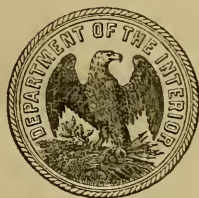


A CONSOLIDATED SCHOOL IN INDIANA. OLD SCHOOL IN USE AS COTTAGE FOR JANITOR.

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1877-1878
By A. C. MONAHAN 1877-
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CONTENTS.

	Page.
I. History and extent of the movement.....	5
Introduction.....	5
The first consolidation.....	7
The Montague consolidated school.....	8
The Concord consolidated school.....	9
Other consolidation in Massachusetts.....	11
Consolidation in Ohio.....	13
Consolidation in Indiana.....	13
Consolidation in other States.....	14
Status of consolidation in various States.....	16
II. State legislation concerning consolidation and transportation.....	26
(A) Requirement of law and of the North Dakota State Board of Education for classification on consolidated schools.....	28
(B) Wisconsin special State aid to assist in erecting and equip- ping consolidated-schools buildings.....	29
(C) Wisconsin special aid to assist in providing transportation to consolidated schools.....	31
(D) Laws relating to consolidation of rural schools in Minnesota (the Holmberg Act), 1911.....	31
(E) Summary of State laws on consolidation.....	34
III. Transportation arrangements and cost.....	43
(A) The details or arrangements for transportation.....	45
(B) Cost of public transportation.....	50
(C) Contract with driver.....	53
IV. Cost of the consolidated school.....	55
Cost of small schools in Tennessee and North Carolina.....	55
Comparative cost of tuition in Iowa.....	55
Cost of consolidated schools in Illinois.....	56
Cost of consolidated schools in Indiana.....	57
V. Educational advantages of consolidation.....	58
(A) Rural supervision.....	60
(B) Classification of pupils.....	61
(C) Division of time between study and recitation.....	61
(D) Vitalizing the school work.....	63
(E) High-school courses.....	64
(F) Socializing influences of the consolidated school.....	65
(G) A permanent teaching force.....	68
(H) Summary.....	69
VI. Some types of consolidated schools investigated and reported by collaborators of the bureau.....	70
(A) The Mays Lick consolidated school, Mason County, Ky.....	70
(B) The Comstock (Mich.) consolidated school.....	78
(C) The Port Wing consolidated school, Port Wing, Wis.....	80
(D) The Wool Market consolidated school, Harrison County, Miss.....	82
(E) Garfield consolidated school, State of Washington.....	84
(F) Moro consolidated school, Arkansas.....	87

	Page.
VII. Macdonald consolidated-school movement in Canada.....	89
The school at Middleton, Nova Scotia.....	90
The New Brunswick school.....	92
The school at Guelph, Ontario.....	94
The school on Prince Edward Island.....	95
VIII. Agriculture and domestic science in the Harlem (Ill.) consolidated school.....	97
Bibliography of consolidation of schools.....	101
INDEX.....	105

ILLUSTRATIONS.

	Page.
Plate 1. A consolidated school in Indiana.....	Frontispiece.
2. A, Garfield consolidated school; B, Alhambra consolidated district, near Phoenix, Ariz.....	16
3. A, Green Meadow School, Ada County, Idaho; B, Utah County, Utah.....	16
4. A, Caledonia consolidated school, North Dakota; B, consolidation in North Dakota.....	16
5. The Montague (Mass.) high and consolidated schools.....	32
6. A, The Cedron (Ia.) schoolhouse; B, Medford consolidated school.....	32
7. A, A mountain consolidated school of two rooms; B, A South Carolina union school.....	32
8. A, Transportation wagon, Shelby County, Tenn; B, Winter transportation at Kirksville, Mo.....	48
9. A, Transportation wagons, White River Township consolidated schools; B, Automobiles used to transport pupils at the Brawley School, Imperial County, Cal.....	48
10. Various types of transportation.....	48
11. A, Interior farm mechanics' building, Snohomish consolidated school, Washington; B, School garden, poultry house, and farm mechanics' building, Snohomish school, Washington.....	64
12. A, Agricultural buildings and flower bed, Snohomish consolidated school, Washington; B, Class in cooking, Snohomish school, Washington.....	64
13. A, Plowing contest; B, Testing milk from neighboring farms, Harlem consolidated school, Rockford, Ill.....	64
14. Socializing activities made possible by consolidation.....	64
15. A, Port Wing consolidated school, Wisconsin; B, Moro consolidated school, Arkansas.....	80
16. A consolidated school at Mays Lick, Ky.....	80
17. The Macdonald consolidated school, Kingston, New Brunswick.....	80

CONSOLIDATION OF RURAL SCHOOLS AND TRANSPORTATION OF PUPILS AT PUBLIC EXPENSE.

I. HISTORY AND EXTENT OF THE MOVEMENT.

Introduction.—"Consolidation of schools" is the term used when two or more school districts are made into a single district, one school in one building replacing two or more small schools in several buildings. In some States when but two schools are replaced by one, the new school is called a "union" school, the term "consolidated" being applied only when three or more schools are replaced by a single school. In other sections the term "consolidation" is used only in speaking of a school to which children are transported at public expense. When a single school is abandoned on account of the lack of sufficient pupils to keep it open, and the children attend school in a neighboring district, the term "consolidation" would seldom be applied. Consolidation in its best form takes place when schools not forced to close for lack of pupils are deliberately abandoned for the purpose of creating a larger school where more efficient work may be done, or equivalent work at less expense.

Ohio uses the term "centralization" instead of "consolidation," a centralized school being one located where it may be most convenient for the children of an entire township. Sometimes the "centralized" school is located in the village nearest the center; sometimes it is located in the open country. Some of the Ohio centralized schools are housed in two or more buildings; the usual number, however, is but one. Many Western States have schools which to all intents and purposes are consolidated or centralized schools, although they do not replace older one-teacher schools. They are the original schools built to serve large territories and existing from their first establishment as two or more teacher schools.

The two primary motives in the movement for consolidation have been and still are (1) for the purpose of securing better educational facilities, and (2) for the purpose of decreasing the cost of education on the school district. Considerable space is given to the discussion of both of these subjects later in this bulletin.

The movement for consolidation has assumed several different forms. One is illustrated by the "union schools" in North Carolina. In this State in the past 12 years more than 1,200 small district one-teacher schools have been replaced by less than half that number of two and three teacher schools, all located within walking distance of the pupils' homes. If districts so formed do not contain more than 10 or 12 square miles of territory, and the schools are centrally located relative to the population, no child will have an excessive distance to walk. In a square district 3.5 miles on a side, or $12\frac{1}{4}$ square miles in area, the greatest distance from any part of the district to a school located at the geometrical center is approximately 2.5 miles, and four-fifths of the territory of the district is within $1\frac{3}{4}$ miles of the center. This movement in North Carolina is therefore one of probable wisdom. The greatest gain in efficiency in consolidation comes in the making of two-teacher schools to replace those with one teacher. The two-teacher school may be as efficient in its elementary work as a larger one; of course it can not give the social advantages and the opportunity for high-school departments that can be given in larger schools.

In discussing this type of consolidated school the Commissioner of Education, in his introductory chapter for the 1913 report, says:

I suggest that the rural schools be consolidated as much as can be done without too much inconvenience for children or too great a cost for transportation. In a carefully laid-out school district of 10 or 12 square miles, with a schoolhouse at or near the center, few children have to travel more than a mile and a half to or from school. Except in the worst winter weather this is not too far even for small children to walk. There is now little or no reason why the country school for young children should be in session when the weather is worst and not in session when the weather is good; and walking through country lanes, across fields, or along forest paths is pleasant and health giving. In most counties in the Eastern, Northern, Southern, and Middle Western States, and in many of the more densely populated counties of the Pacific States, there is now a school for every five or six square miles, and in many counties a school for every three or four square miles. The number of schools is larger where the population is more dense and smaller when it is less dense. In many counties one-room one-teacher schools are scattered along the roads and across the country little more than a mile apart. By making a school district of 10 or 12 square miles (12 square miles means only $3\frac{1}{2}$ miles square), two, three, or four schools, and sometimes as many as five schools, each with one or two teachers at the most, could be brought together into one.

This consolidation would give to each school a larger number of teachers and make it possible to organize the school with principal, special teachers for different subjects, fewer daily lesson periods for each teacher, a better school spirit among both pupils and teachers, more variety in studies, and many other advantages.

Another form of the movement is illustrated by the "partial consolidation," resulting from limiting the number of grades in one-teacher schools to four, five, or six, and providing a central school

for children who have completed these grades. In Louisiana, for example, 11 parishes (counties) have by action of the parish boards of education limited the number of grades in one-teacher schools usually to five. Children completing the work of the fifth grade are given opportunity for further education in centralized schools to which they are transported at public expense or paid a small amount in lieu of transportation. As another example Franklin County, Ky., might be cited. The county is divided into four educational divisions, each with a division board of education and each containing from four to nine school subdistricts. In each division there has been established a central school for all children in the division in the seventh, eighth, ninth, and tenth grades. After completing the tenth grade the children desiring to receive a full high-school education go to the county high school for the work of the eleventh and twelfth grades.

Southington Township, Conn., has a total population of 6,516 persons and an area of approximately 36 square miles. There were 1,546 children of school age, 1,413 of whom were enrolled in school in 1911-12. In the 14 school buildings in the township, 41 teachers were employed, 7 of whom were in one-teacher schools and 4 in two-teacher schools. The small schools in outlying districts do the work of the first five grades only. Children from these schools take their sixth, seventh, eighth, and ninth grade work in the central schools. They attend also a central high school. Transportation expenses are allowed, 5 cents per day to those living on the trolley line and 10 cents per day to the others. This is about one-half the cost of transportation.

The first consolidation.—When consolidation, as the word is generally understood, began in the United States is difficult to say. Probably in the older States from very early times schools had been abandoned for the sake of economy and the children sent to neighboring schools. In Massachusetts enough such instances had occurred previous to 1869 so that a question came before the legislature in that year as to whether or not children from an abandoned school district might be transported to another district at public expense. The legislature acted favorably, and school trustees were authorized to pay for the transportation of children to a neighboring district out of the school funds. The law reads as follows:

Any town in the Commonwealth may raise by taxation or otherwise and appropriate money to be expended by the school committee in their discretion in providing for the conveyance of pupils to and from the public schools.

Hon. Joseph White, formerly secretary of the State board of education, stated that the act was introduced into the legislature through the efforts of a practical man from one of the rural townships of large territory and sparse population, where the constant

problem is how to bring equal school privileges to all without undue taxation. The first children carried to school at public expense under the provisions of this act were in the town of Quincy, in the eastern part of the State. There, in 1874, a school with less than a dozen children was closed and the pupils carried to another one-teacher school, the union making a school not too large for one teacher. The district abandoning its school paid tuition and transportation expenses and found the outlay less than the amount which would have been required to maintain the old school. No special educational advantages came to the pupils transported, except from the association with a greater number of children.

The Montague consolidated school.—The first consolidation for the definite purpose of securing for the children better educational opportunities appears to have occurred in Montague, Mass. There, in 1875, as a result of a campaign conducted principally by one of the school committee, Mr. Seymour Rockwell, three "district" schools were abandoned and a new brick building erected at a central location, to which the children from the abandoned districts were transported at public expense. This school is still in a flourishing condition. It serves a territory of approximately 20 square miles. A high-school department was added very soon after the school was established and graduated its first four-year class in 1884.

Seymour Rockwell, in 1893, wrote as follows regarding the Montague consolidated school:

For 18 years we have had the best attendance from the transported children; no more sickness among them, and no accidents. The children like the plan exceedingly. We have saved the town at least \$600 a year. All these children now attend a well-equipped schoolhouse at the center. The schools are graded; everybody is converted to the plan. We encountered all the opposition found anywhere, but we asserted our sensible and legal rights and accomplished the work. I see no way of bringing the country schools up but to consolidate them, making them worth seeing; then the people will be more likely to do their duty by visiting them.

With its largest attendance the school enrolled about 175 pupils, more than one-fourth of whom were in high-school grades. Pupils came to the high school from neighboring districts, which were able to take care of elementary pupils locally, but wanted the special high-school opportunities. The children were transported in six school wagons, and later in five wagons and one trolley car.

The total number of children transported in 1912-13 was 85, at a total expenditure of \$1,550.82, or 10 cents per pupil per day. Each driver received an average of \$1.70 per day, or \$312 per year, and carried an average of 17 children. The shortest route is 2 miles, the longest 4.5 miles. The drivers furnish their own wagons and teams. The wagons must be inclosed in stormy weather and equipped with straw or rugs under foot and with robes. The drivers are under

contract with the school authorities and must cover the routes on schedule time. They have full authority over the children while on the road and enforce good conduct. The wagons do not stop at all the houses where pupils live, but follow routes laid out by the school authorities, picking up the children along these routes.

From the beginning the history of this consolidated school is one of satisfaction. The building was made modern in every respect. It was heated by hot air and properly ventilated and lighted. It had indoor toilets and running water from a neighboring hillside spring. The majority of its high-school teachers have been college graduates; its elementary teachers normal graduates. The high-school department was among the first country high schools in the State to be put upon the accredited list by the New England college entrance board.

The 39 years of its existence has given ample opportunity to compare the value of the consolidated school with the one-teacher school and to work out satisfactorily many of the problems in connection with public transportation. The high-school department has afforded an opportunity for a constant comparison of the work of pupils whose elementary schooling was received in the consolidated school and those whose elementary schooling was received in surrounding one-teacher schools. The comparison brings out much evidence in favor of the consolidated school work as the more efficient. Also there has been afforded an opportunity to study the advantages and disadvantages of transportation in school wagons under school authority and in public electric cars. The experience has resulted in a sentiment in favor of the school wagons. Little disorderly conduct or improper speech ever occurred on the wagons, while both occurred more or less frequently on the cars. The wagon drivers, because they were engaged by the school board, were recognized by the children as in authority; the carmen were not so recognized.

The Concord consolidated school.—The second consolidated school in the United States was probably one established in Concord, Mass. A central building was erected in 1879, replacing several one-teacher schools. Concord at that time, with the township, included about 4,000 inhabitants. The area was about 25 square miles. For school-administration purposes it was divided into two village districts and five rural districts. Prior to 1879 the common schools were 12 in number, occupying 11 houses. Five of these schools were in the central village; two, in the same building, were at West Concord; the remaining five were in the outlying farming districts. The district schoolhouses were at distances of from $1\frac{1}{2}$ to 3 miles from the center. At the center was a high school to which pupils came from all parts of the township. The new building was called the Emerson

School and contained eight rooms. When first opened it replaced the five schools of the central village. The following account of the absorption of the district schools by the Emerson School is given by W. L. Eaton, formerly superintendent of schools of Concord, Mass.¹

In 1879 the school in district 7 was closed and the children conveyed to the center, because the committee "did not feel justified in keeping the school open for the small number of pupils attending it." About the same time the grammar-school pupils in district 2 were directed to attend the center school and "to make their own way thither." In 1881 Supt. Tileston reports that the children of district 7 "have been carried to the school of the village for more than a year. The parents were at first mostly opposed to this course. They seem now entirely satisfied and would not have their old school if they could." In 1881 the parents in district 2 petitioned the committee to close their school and convey their children to the center. A counter petition was sent in, however, before action had been taken. The committee, preferring to wait for a more permanent sentiment, did not close the school. In the same year the school in district 5 was closed without opposition. An attempt to close at the same time the school in district 6 met with so strenuous opposition that the committee did not persist in closing it. In their next report (1882), the committee refer to their action as follows:

It has not been the policy here to bring the children of the outside districts to the central schools unless the voters of the district desire it. When the number of pupils is less than 10, the committee feel that they are not warranted in incurring the expense of keeping a separate school.

They also urge that—

it is a question which the parents in the outer districts of the town should consider carefully, whether the instruction at the center of the town is not better, as well as cheaper, than it can be made in their own schools, and what is their duty in such a case.

In 1885 the school in district 3 was closed at the request of the local member of the school committee. In 1887 the parents in district 2 petitioned the committee to convey their children to the center. The committee acted promptly and began to convey the children. A counter petition then was sent in, but an investigation was made, and the committee, consulting what they "believed to be the best interests of the children," denied the second petition. In the same year the school in district 6 was closed by vote of the committee, and the scheme of consolidation was effected.

The apprehensions of the owners of real estate that a depreciation of values would result if the local schools were closed have proven to be groundless. The natural reluctance of parents to send their young children so far from home and for all day, to attend the center school, has vanished. The children are conveyed in comfortable vehicles fitted up for their accommodation. They are in charge of trusty drivers en route, and at noon they are under the especial care of one of the teachers, who has an extra compensation for the service. When it is practicable, a farmer living near the extreme end of the district is employed to convey the children. Often the farmer's wife drives the conveyance—an arrangement that meets the entire approval of the school committee, and is, perhaps, the most satisfactory one possible. As a rule the committee do not approve of intrusting the duty to the hired man. Three 2-horse barges and two 1-horse wagons are in use at present. All these vehicles are fitted with seats running lengthwise and are closed or open at sides and ends as the weather requires, and in cold weather are provided with blankets and straw.

¹ Massachusetts Educational Exhibits at the World's Columbian Exposition.

The driver starts from or near the remote end of his district and drives down the principal thoroughfare, taking up the children at their own doors or at cross-street corners.

The attendance of the children conveyed is several per cent better than that of the village children, and it is far higher than it was in the old district schools. This is not strange when one reflects that the children are taken at or near their own doors and conveyed to school without exposure in stormy weather and with entire comfort in cold or snowy weather. Discipline in the carriages is maintained readily, as the driver has authority to put out any unruly child. The children are conveyed from $1\frac{1}{2}$ to $3\frac{1}{2}$ miles. The cost of transportation is about \$50 per week. It is estimated that it would cost \$70 a week to maintain schools in all the districts. The number of teachers in the center school is not increased by the consolidation, as the 80 to 100 children from the districts are distributed quite uniformly among the various rooms.

Other consolidation in Massachusetts.—Following the Concord consolidated schools came others in the neighboring townships. Progress was slow, however. In 1882 the State abandoned the single district organization and adopted the township unit organization. Since that time each township, including the village, town, or city, has been a school unit, with its school affairs managed by a single school board. With the adoption of this form of organization consolidation became much easier, and the movement advanced more rapidly. In 1888 104 townships out of a total of 240 in the State were spending money for the conveyance of pupils. In the school year 1888–89 the amount paid for that purpose was \$22,118.38. In 1891–92 160 townships and cities were paying a total of \$38,726.07 for transportation. A study made by Mr. Eaton, superintendent of Concord, who obtained data from 135 towns in 1892, showed that 15 of these towns were transporting high-school pupils only. The remaining 120 towns, prior to the beginning of the movement to consolidate, had supported 632 outlying schools. In 12 years 250 of these had been closed.

In regard to the satisfaction given by the plan, Mr. Eaton has the following to say:

The reasons for closing schools were given as "financial and educational." In many of the towns of the State depopulation of the districts outside of the villages has made it cheaper to transport to other schools than to teach them in situ. * * * In other towns the desire to make strong central schools and the purpose to give all of the children of the town the benefit of better appliances, better teachers, and better supervision have been the dominant motives to determine consolidation. * * * There is a substantial agreement in the affirmative that results have been satisfactory.

In 1898, Mr. G. T. Fletcher, agent of the Massachusetts Board of Education, made an inquiry in the State concerning the extent of consolidation and the result from an educational and financial viewpoint. About 200 towns out of the 240 in the State reported. More than 65 per cent of this number reported that they had found it necessary or advantageous to close and consolidate some schools.

Movements of population inside town or city limits, as well as the exodus of people from many towns, had led to the closing of schools, but had not necessarily involved the transportation of pupils. The different towns reported from 1 to 10 schools as having been closed. As a rule, consolidation was partial only. In a few towns it was complete. In a few instances consolidation was accomplished "at one stroke." Most frequently, however, it was accomplished gradually. In 25 instances it was accomplished by taking pupils from the higher grades to a central high-school building. The inquiry revealed that 60 per cent of the towns reporting consolidation stated that the cost to the town was less than the old plan and the results better; 15 per cent that the cost was the same and the results better; 8 per cent, the cost more and the results better; 8 per cent, the cost more, but the results not stated. In the remaining 9 per cent the cost and the result were not stated. The inquiry also showed the attitude of the public toward the policy of consolidation as seen by the school authorities—70 per cent of the people approved the policy and 30 per cent opposed it.

In 1895 the State provided for its sparsely settled portions "union supervisory districts," composed of two or more of the smaller townships, and required the employment of professionally trained superintendents, approved by the department for each district. This action further stimulated consolidation. At the present time the State has comparatively few one-room schools left. J. E. Warren, until recently an agent of the State board of education, in a letter to the Bureau of Education in 1912, reported that there were then less than 900 one-room schools in the State. That is, fewer than 900 teachers out of 15,979 employed in the State were in one-teacher schools.

An idea of the extent of the consolidation movement in the State may be gained from the following figures, showing the expenditures of public-school superintendents for transportation each year since the State board of education began collecting such information:

Aggregate cost of conveyance in Massachusetts.

	Amount expended.		Amount expended.
1888-89	\$22, 118. 38	1901-2	\$165, 596. 91
1889-90	24, 145. 12	1902-3	178, 297. 64
1890-91	30, 648. 68	1903-4	194, 967. 35
1891-92	38, 726. 07	1904-5	213, 220. 93
1892-93	50, 590. 41	1905-6	236, 415. 40
1893-94	63, 617. 68	1906-7	252, 451. 11
1894-95	76, 608. 29	1907-8	265, 574. 09
1895-96	91, 136. 11	1908-9	292, 213. 33
1896-97	105, 317. 13	1909-10	310, 422. 15
1897-98	123, 032. 41	1910-11	329, 857. 13
1898-99	127, 409. 22	1911-12	362, 185. 00
1899-1900	141, 753. 80	1912-13	384, 149. 00
1900-1901	151, 773. 47		

Consolidation in Ohio.—The movement spread from Massachusetts to other Northeastern States and the West and South, until now it is doubtful if a State can be found in the Union without several examples of successful consolidated schools. Ohio and Indiana took hold of the idea earlier than most of the other States. Consolidation was easier to establish in these States than in the great majority of States, because both Ohio¹ and Indiana, like Massachusetts, are organized on the township basis, except that in Ohio and Indiana cities and towns may be independent school districts, with their schools separate in every way from the rest of the schools in the township.

The first consolidated school in Ohio was the Kingsville School, in Ashtabula County. A. B. Graham, in a bulletin of the Ohio State University, says:

In 1892 the Kingsville Township board of education was confronted with the necessity of providing a new school building. Their schools were small, and the per capita expense was unduly large. It was finally agreed to transport the children of the township to Kingsville, which was one of the district schools of the township. For the cost of transportation a special bill was introduced into the general assembly and became a law April 17, 1894. The measure applied only to Kingsville Township. In the succeeding general assembly another measure was passed for the relief of the counties of Stark, Ashtabula, and Portage. On April 5, 1898, the general assembly passed a general law on the subject. In 1897, one year before the law was made general, Mad River Township, in Champaign County, transported 18 children to Westville rather than establish a new subdistrict and build a new schoolhouse. This was the first step toward establishing a centralized school in western Ohio.

A law of Ohio, approved April 25, 1904, authorized the board of education in any township to suspend schools in any or all subdistricts in the township and convey pupils to a centralized school, with the provision that no school with an average daily attendance of 12 or more could be abolished against the opposition of the majority of the voters in the district. Following the passage of this law, the movement for consolidation progressed rapidly. In 1910, there were 178 centralized or consolidated schools in the State; 49 of these were township schools serving the entire township. In 1912, there were 192 townships out of 1,370 in the State with their schools completely or partially centralized. The new school laws of 1914, given elsewhere in this bulletin, are intended to promote more rapid centralization.

Consolidation in Indiana.—Consolidation in Indiana was first agitated by Caleb Mills in 1856. Nothing of importance, however, was done until 1889, when the legislature passed an act recognizing the right of township trustees to pay for the transportation of pupils to consolidated schools. In 1912, there were in the State 589 consolidated schools, distributed in 73 of the 92 counties in the State.

¹ Ohio changed from the township basis to the county in July, 1914.

There were still, however, 6,962 of the old district schools left, so that there is room for much further consolidation. Approximately 37 per cent of the rural children in daily attendance are in consolidated schools.

Some of the principal facts in regard to consolidation in Indiana, taken from the annual report of the State superintendent of public instruction for 1911-12, are as follows:

Number of consolidated schools.....	589
Number of district schools remaining.....	6,962
Number of regular school wagons.....	1,446
Number of other vehicles used in transporting school children.....	532
Cost of regular wagons per day.....	\$2.24
Total cost of all wagons per day.....	\$3,218.00
Total cost of transportation per year.....	\$477,110.00
Average cost per child per year.....	\$19.04
Average length of route, in miles.....	4.5
Average length of time children are in wagons, in minutes.....	81
Per cent of improved roads traveled by wagons.....	77
Average daily attendance in consolidated schools.....	31,314
Average daily attendance in district schools.....	85,583

Consolidation in other States.—Massachusetts, Ohio, and Indiana have established a greater proportion of consolidated schools than any other States. The extent of the movement in all of the States is given in the following pages. It will be noticed that the movement has gone furthest in States with large administrative units for school affairs—that is, in those with the county or the township organization; and that it has made little headway in States with the small “school district” unit, except in a few where a relatively large amount of financial aid is given by the State as a stimulant. The New England States, and New Jersey, Ohio,¹ Indiana, and North Dakota, all of which have many consolidated schools, are organized for school management on the township basis. Virginia, North Carolina, Louisiana, and Tennessee, which also have many consolidated or union schools, are organized on the county basis. Washington and Minnesota, the only States organized on the single-district unit that have made much progress in consolidation, have done so on account of special State aid.

The dependence of the movement for consolidation upon the form of organization is well illustrated by the States of Indiana and Illinois, the first with about 600 consolidated schools, the second with less than 50. Indiana is organized on the township basis, so that all the schools in any township are under the control of one agency. Illinois is organized on the “district” basis, the district being usually in rural territory, the area served by a single school. Each district has three trustees to manage the affairs of the school and to regulate the work of the teacher. The State has more than

¹ Ohio adopted the county unit basis in 1914.

10,000 one-teacher schools; these 10,000 schools with 10,000 teachers are managed by 30,000 trustees. Consolidation under such conditions is difficult, since it means the formation of new districts out of two or more old districts, which is accomplished only after an adjustment has been reached of the business affairs and the jealousies of the old districts. Experience shows that sometimes the district trustees are the most difficult persons in the district to convince of the advantages of consolidation. The honor of serving in their position is sweet to them and given up reluctantly.

The two States organized for the management of rural school affairs on the single-district basis, which have made notable progress in consolidation, are, as has been stated, Washington and Minnesota. Washington pays from the State school funds to consolidated schools an annual bonus of \$170 for each school abandoned less one; to illustrate, if six districts combine and establish a single consolidated school, the new school receives each year from the State five times \$170. In Minnesota, previous to 1912, practically no consolidations were effected. In 1911 the legislature passed the Holmberg Act, described more in detail elsewhere in this bulletin.¹ Under it consolidated schools are classified and aided from State funds. The first year under the operation of the act 141 old districts were formed into 60 new districts. North Dakota, Missouri, Wisconsin, and Iowa adopted, in the 1913 session of their legislatures, measures somewhat similar to the Holmberg Act.

The following interesting statement of the beginnings of consolidation in Louisiana is by the State superintendent of public instruction. Louisiana is organized on the county basis, the parish (county) board of education having complete control of the educational affairs of the parish.

How Louisiana began consolidation.—The consolidation idea in Louisiana had its birth in 1902 and was due to a cyclone. In the parish of Lafayette, a cyclone destroyed a one-room schoolhouse located about 6 miles from the town of Scott. This occurred during the session, and as the building of a new schoolhouse would cause the children to be out of school for a month or so, two public-spirited citizens, members of the school board, Dr. Moss and Mr. Judice, proposed to furnish a wagonette temporarily at their own expense to be used in transferring the children who had been attending the little school that was destroyed to the school located in the town of Scott. Their proposition was accepted by the board and the new plan put into operation. The idea worked out so successfully that the board decided not to rebuild the house, but to put in a permanent wagonette. Other communities in Lafayette heard of the new plan and petitioned the school board to place their children in central graded schools. In a year or so Lafayette parish had made practically every consolidation that was possible and was operating a large number of wagonettes in which children were transported to central schools. Gradually the idea worked out through all parts of the State, and other parishes began trying the plan.

¹ See p. 31.

The system now is general throughout Louisiana, practically every parish in the State having consolidated schools and most of them operating school transfers.

The number of strictly consolidated country schools is 210, and the number of school wagonettes in use is 259. The average monthly cost of operating wagonettes is \$38, and the average number of children transported is 17. The following statistics will give a fairly correct idea of consolidation in this State. These statistics relate to white schools only and are for 1912.

Number of schools of one teacher, 1,486; two teachers, 351; three teachers, 89; four or more teachers, 117.

Several methods of transportation are employed in different parishes. In some cases the school board operates the wagonette and team and employs a man at so much per month to carry the children to and from school. In other instances the board buys the wagonette and employs a driver who furnishes his own team. In many cases the school board furnishes no wagonette, but pays each parent living beyond a certain distance from the school a certain monthly allowance for each day that his children attend the school. In still other cases the board limits the number of grades in the one-room schools, and all children of that community in higher grades are paid so much per day for attending a school which has higher grades. Each plan is working successfully.

STATUS OF CONSOLIDATION IN VARIOUS STATES.¹

Alabama.—From 1912 to 1913 there was a decrease of from 4,590 to 4,419 public schools in the State. This decrease was due almost entirely to the establishment of "union schools"; that is, a one or two teacher school in a single building taking the place of two separate old schools. Consolidated schools with public transportation are found only in a few instances. In Mobile County, the only part of the State where public funds may be used for transportation, there are five consolidated schools, and in Sumner and Geneva Counties there are one each, with pupils transported at private expense. Ten school wagons and twelve private conveyances are used to transport the children to these schools. The average route is 3.5 miles.

Arizona.—The school law authorizes consolidation and transportation at public expense. Under the provisions of this law many districts have united and built better school buildings and provided better schools, but no case is reported where pupils are transported to such schools at public expense.

Arkansas.—"The basis for the work of consolidation of school districts in the State was fixed in the passage by the legislature in 1911 of an act which provides in a comprehensive way for the consolidation of two or more adjacent school districts by vote of the people of the districts to be affected. Before the passage of this act, there was no adequate law for the consolidation of districts and there had been comparatively little done in the way of consolidation. With the new law as a basis for work, a good beginning has been made. On January 1, 1912, Mr. J. L. Bond was appointed supervisor of rural schools. He is cooperating with county superintendents, examiners, and teachers, in this campaign of education for consolidation. The number of new consolidated schools established so far is 18; approximately 225 districts have been reduced to 75. Transportation of pupils at district expense has been begun in most of these cases. There are about 24 wagons in use, paid for out of public money.

"The consolidated work is being well received, and the people are more and more coming to realize and know that consolidation offers a safe, sane, and

¹ This statement has been compiled from the latest available State reports, supplemented by official correspondence. In many States, however, even the State departments are unable to furnish information on consolidation that is not at least 2 years old.



A. GARFIELD CONSOLIDATED SCHOOL, GARFIELD, WASH.



B. ALHAMBRA CONSOLIDATED DISTRICT, NEAR PHOENIX, ARIZ.



A. GREEN MEADOW SCHOOL, ADA COUNTY, IDAHO.

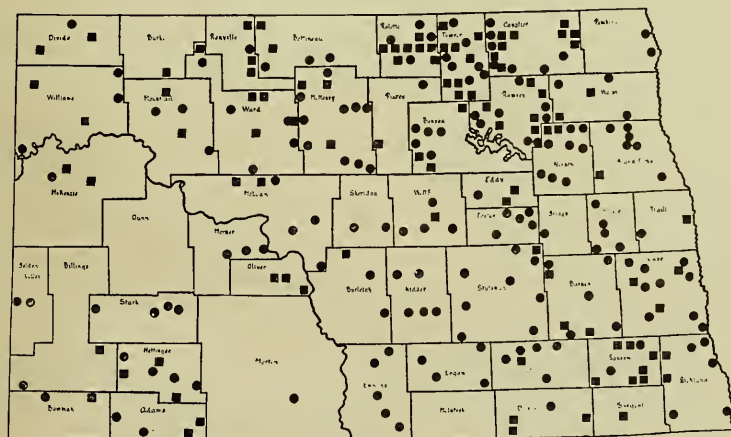


B. UTAH COUNTY, UTAH.



A. CALEDONIA CONSOLIDATED SCHOOL, NORTH DAKOTA.

CONSOLIDATED SCHOOLS in NORTH DAKOTA



• Town Consolidated Schools 170

■ Open Country Consolidated Schools . . . 101

Prepared by W. C. Macdonald
Vulley City, N. Dak., July 1, 1914

271

B. CONSOLIDATION IN NORTH DAKOTA.

practical plan for building up strong schools in the rural communities of the State." (G. B. Cook, State superintendent of public instruction.)

California.—"California has had on its statute books for about 10 years a law permitting the consolidation of schools and the transportation of pupils at public expense, but has not as yet made wide use of either idea. The difficulty seems to be inertia and a reluctance to give up the little home schoolhouse. There are perhaps a dozen consolidated schools in the States, and they have been very successful. Our laws for transportation authorize high schools to act to any extent in transporting their children and elementary schools to a limit of 15 cents per day per pupil. Advantage has been taken of this more extensively, and with satisfactory results. Several schools have employed automobiles or autotrucks to transport the children. These are swift, efficient, and satisfactory. Many high schools and rural schools have operated school wagons with excellent results." (Edward Hyatt, State superintendent of public instruction.)

Colorado.—In June, 1912, according to the State superintendent of public instruction, there were 13 consolidated schools in the State, to which 350 children were transported at public expense, the cost being \$1.29 per child per month. In the following year seven additional consolidations were made.

Connecticut.—According to the annual report of the State board of education for 1911, consolidation of schools began in 1897-98. In that year 84 schools, located in 44 different townships, were closed, and the children transported to other schools. From 1897 to and including 1912, 1,151 schools have been closed. In 1911-12, 3,481 children were transported at public expense, the total cost for transportation being \$82,465.97. In addition to this amount, \$32,656.57 was paid for the transportation of high-school pupils.

Delaware.—Very few consolidations have been effected. As far as information has been obtained, no children are transported at public expense.

Florida.—The annual report of the State department of public instruction for 1912 states that "12 counties in the State have made fair progress in the consolidation of schools." No data are available to show the extent.

Georgia.—In 1911 Georgia gave legal sanction specifically to consolidation and transportation at public expense. According to the figures collected by the State department of education, there were, in 1913, 109 consolidated schools, to which 1,928 pupils were transported at public expense in 141 wagons. The average cost of transportation per child per year was \$10.03. In a few counties something had been done before this act was passed, Fulton and Hancock having done perhaps more than any others.

Idaho.—Several consolidated schools are found in the State. The Twin Falls consolidated district is 42 square miles in extent, and children are transported in 17 wagons. Jerome district has an area of 220 square miles, a total enrollment of 353 pupils, and an average daily attendance of 339. Much of the district, however, is unsettled. Eleven wagons convey pupils to and from the school.

Illinois.—In 1913 there were 40 consolidated schools in the State. "The consolidation of districts and the establishment of centralized schools has been making slow progress. In every legislature for 10 years a vigorous effort to secure legislation which would facilitate this movement has been made, but has failed. The Farmer's Institute, the State university, and quite a number of county superintendents have favored the measure. Conservative people dislike to make the change. They dread the long drive to the schoolhouse and fear that the condition of the roads will make it impracticable. But the effective opposition comes from certain landlords, and certain private school interests.

"At Seward, in Winnebago County, the first consolidated school was established in 1903. Three districts were united, and a four-room school has since been maintained. Transportation of pupils has not been undertaken. The school does not differ from the village schools of the same number of rooms and teachers.

"Near the village of McNabb, in Putnam County, Mr. John Swaney gave 20 acres of fine land, and three districts united. The building cost about \$20,000. A four-room school is maintained, having a full four-year high-school course, agriculture being one of the studies carried through the four years. The school is located in the open country and is in fact an up-to-date rural school. There are few schools in the entire country that put into practice so many advanced ideas as this school. It is patronized by the advanced pupils of all the country round. Only the best qualified teachers are employed. Pupils were transported at first at public expense, but on complaint of taxpayers the circuit court enjoined the authorities from doing so, and now the expense of running wagons is paid by private subscription.

The Harlem School, just outside the city limits of Rockford, in Winnebago County, was formed by the union of four districts, through which an inter-urban railroad extends. Like the John Swaney School, it puts into practice modern ideas of rural education.

"The Scotland School, Edgar County; district 115, Woodford County; Hindsboro School, Douglas County; and Buncomb School, Johnson County, are located in small villages, one or two districts having been annexed. They differ little from ordinary village schools.

"The most extensive consolidation has just taken place in Paw Paw Township, in DeKalb County. The territory comprises about 36 sections of land. Eight districts have been consolidated and a \$30,000 building erected. Transportation is absolutely necessary in this district, and the authorities have undertaken it.

"Consolidation will not advance rapidly until the law is so changed as to permit it without the danger of a lawsuit." (F. G. Blair, State superintendent of public instruction, 1912.)

Indiana.—Indiana had 589 consolidated schools in 1912, attended daily by 31,314 children. Information concerning Indiana has been given in the first pages of this bulletin.¹

Iowa.—In the annual State school report for 1911–12, Iowa reports the following statistics regarding the consolidation in that State for the year ended June 30, 1912. A study of the attendance and cost of some of these consolidated schools as compared with district schools is given in another place in this report.

Total number of consolidated schools.....	47
With 8 grades in course.....	4
With 10 grades in course.....	11
With 11 grades in course.....	9
With 12 grades in course.....	22
With 13 grades in course.....	1
Number of schools abandoned before June 30, 1911.....	84
Number of schools abandoned after June 30, 1911.....	18
Number of pupils from abandoned schools in consolidated schools	1,554
Number transported at public expense.....	1,643
Number of school wagons.....	93
Total cost of transportation.....	\$34,607
Total enrollment.....	10,217
Average daily attendance.....	8,254

¹ See p. 13.

Kansas.—"The first consolidated school in Kansas was established in 1896. Since then 75 others have been organized and are in operation. Between 6,000 and 7,000 pupils are in attendance at these schools. The area served by them is something more than 1,200 square miles. Many of these schools have established high-school courses, some of them with the full four years. In every instance the movement has proved to be an unqualified success.

"As in many other States, the number of schools in Kansas having small enrollment or average daily attendance is very great. To overcome this condition and to render the schools really efficient, consolidation seems to be the only remedy. That more rapid progress has not been made is due chiefly to the objection of violating the traditions, and to the fear that consolidation may mean increased expense. In the light of our Kansas experience, it is my judgment that State aid should be provided for all consolidated districts. This aid ought not to be considerable, but would prove a temptation that would overcome much of the present inertia. I can not speak too strongly of the entire success of this movement, and believe that it is one of the most complete solutions of the present rural school problem." (E. T. Fairchild, then State superintendent of public instruction, 1912.)

Kentucky.—The first consolidated school in the State was at Mays Lick, Mason County, effected in 1911. Further information concerning this school is given in another part of this bulletin.¹ Three other consolidated schools were established in the county in 1912. Fayette County has three consolidated schools; Madison County, 1; and Garrard County, 1; all of these were effected in 1912. A great interest in consolidation exists in the State at the present time, due to the appointment in 1912 of approximately 70 supervisors working as assistants to county superintendents, who are all carrying out a campaign of education as to the advantages of consolidation. The movement has been helped also by the establishment of over 200 demonstration schools, each of which is a center for the surrounding district schools, and many of which are beginning to take care of the pupils in the upper grades for the surrounding schools.

Louisiana.—Consolidation in Louisiana began in 1902. In 1912 there were 210 consolidated schools in the State, with 259 wagons, each transporting an average number of 17 children. The extent of the consolidation movement may be gathered from the following figures, which are for the rural schools for white children only:

Number of one-teacher schools.....	1,486
Number of two-teacher schools.....	351
Number of three-teacher schools.....	89
Number of four or more teacher schools.....	117

Further information concerning the Louisiana schools is given in another place in this bulletin.²

There were several consolidations during the year 1913. The number of one-teacher schools decreased 115. Mr. C. J. Brown, State supervisor of rural schools, says in regard to the present movement: "No definite reports along this line have been received at this office. Consolidation is taking place all of the time, but it has become so fixed a policy as not to create any comment nor require any special campaigning, except in rare instances."

Maine.—"The discontinuance of a school and its consolidation with another is accomplished in any of these three ways:

"(1) By operation of the statute which forbids, with certain exceptions, the continuance of a school that has failed for the preceding school year to maintain an average attendance of eight pupils; or—

¹ See p. 70.

² See p. 15.

"(2) By action of the township school committee, which has authority granted by law, to discontinue for a period not to exceed one year any school it believes to be too small for profitable maintenance; or—

"(3) By action of the citizens through the town meeting.

"It will be noted that the second method does not provide for permanent discontinuance; schools are actually discontinued permanently only by the first or third method.

"Maine does not have the district system; the action of the residents of any community is without force. Of course, the sentiment of the local community is an important factor when any action relative to the status of its school is contemplated either by a school committee or by the town itself. In general it should be said that local sentiment is strongly against consolidation, and the discontinuance of a school is very rarely accomplished without strong protest from school patrons.

"A general statute provides that the superintending school committee shall pass final judgment on the necessity of conveyance of pupils. When the committee adjudges the distance from a child's residence to the school is too great to require the child to walk, then the superintendent of schools must secure conveyance for all or a part of the distance, or he may, if specially authorized by the committee, provide board in place of conveyance.

"Under the operation of these statutes there have been discontinued approximately 700 schools. Probably the majority of permanent discontinuances have come about through the first method described.

"During the school year of 1912-13, 7,183 pupils were conveyed to school at the expense of the towns. This number represents a little less than 6 per cent of the common-school enrollment. The conveyance cost the towns approximately \$155,264.

"There has been very little school consolidation in Maine of the kind that takes a number of one-room schools and establishes in their place a school of several rooms. Consolidation has taken the form of uniting two or three very small one-room rural schools into a single one-room school, or of employing a village school as a nucleus and building it larger to accommodate the combined schools." (Payson Smith, State superintendent of public schools, 1912.)

Maryland.—Comparatively little has been done in the State in consolidating schools except the activity of the past year or two. Scattered throughout the State are several instances of consolidation. Montgomery County, for instance, has the Poolesville consolidated school, with public transportation, effected in 1911, and two others effected in 1912. Baltimore and Prince George counties have several.

Massachusetts.—Information concerning the history and extent of the movement in Massachusetts is given in the first pages of this bulletin.¹

Michigan.—The State superintendent reports that there are few consolidated schools in the State, and that no data have been collected by the State department in regard to the half dozen or so which do exist. A report of the Comstock consolidation, abandoned after several years trial, is given later in this bulletin.

Minnesota.—"Consolidation as a State-wide educational policy in Minnesota began with the passage of the Holmberg Act² in 1911. This law provides the inducement of generous State aid for consolidated schools and fixes standards for area of district, building, equipment, teachers' qualifications, industrial courses, and transportation.

¹ See p. 7.

² See p. 31.

"Previous to 1911, Minnesota had only 9 consolidated schools. During the year 1912 there have been over 60 established. The old type was only a school of more than one department and revealed all the faults of the one-room district school. The new type, under the guidance of the State department of public instruction, is an institution with distinctive features.

"1. The building is modern in arrangement, is equipped with central heating plant, fan ventilation, and a water-pressure system for flush closets, and bubbling drinking fountains. Lighting, seating, library facilities, blackboards, and general apparatus are as well provided for as in the best of village and city schools.

"2. Transportation is standardized by requiring that vans used conform to State specifications, and by limiting the distance any child must ride to reach school.

"3. Stress is placed upon securing the best trained and most experienced teachers for this work.

"The principals of the schools are considered vital factors in the success of the movement. To the end that they may be in sympathy with the State's purpose it is the intention to require them to gather for a six weeks' summer course at the State Farm School each season. This season 45 men came together for this purpose. Besides doing regular class work in agriculture and manual training they met with some State representative of the consolidated school movement for one hour each day for the discussion of special problems. It is hoped that these schools are to become centers for the social, economic, intellectual, and moral uplift of the communities in which they are placed.

"Consolidated school aid is \$750, \$1,000, and \$1,500 annually for schools of two, three, and four or more rooms, respectively. There is also building aid of \$1,500.

"Instruction is required in agriculture, manual training, and household economy, and the school is intended to serve as a distributing point for the fund of valuable information collected by the Federal Department of Agriculture and the State colleges of agriculture.

"During the school year of 1911-12 there were transported 911 children at a total cost of \$20,870, or \$21.70 per child. The average number of days of attendance is 150, making the daily cost of transportation per child about 14.5 cents. In schools not consolidated partial reports show about 1,500 children transported at an annual cost of \$2,700, or \$18 per child per year. The average number of days of attendance in these schools is 90, making the daily cost of transportation per child about 20 cents." (E. M. Phillips, rural school commissioner.)

Mississippi.—In the fall of 1907 the State superintendent appointed a committee of three county superintendents to prepare a report on the subject of the consolidation of schools. This report was adopted by the association of county superintendents, and a bill prepared providing for consolidation and transportation for the 1908 legislature. It failed to pass. The bill was reintroduced in 1910, amended and strengthened, and passed. Further amendments were found necessary, and these were provided in 1912. As the result of the 1910 bill and the 1912 amendments the State has consolidated more than 175 schools and has more than 240 wagons in operation.

In 1912-13 there were organized 75 consolidated schools, with the children transported in 100 wagons. The average area of these 75 consolidated districts is 30 square miles; the 75 buildings erected cost approximately \$140,000. During the year Pearl River County replaced 31 schools with 6 consolidated schools, to which children are transported in 21 school wagons; Harrison

County, one of the largest in the State, has 15 consolidated schools, and only 30 one-teacher schools are left.

Missouri.—The State superintendent of public education, Mr. W. P. Evans, wrote in August, 1912: "The story of consolidation in Missouri is a short one. The laws are ready and nothing is needed but that they be taken advantage of; yet practically no consolidation exists. The laws of Missouri permit three or more common-school districts or a village district with two or more common-school districts to unite into a consolidated district. By a law passed in 1911, if two-thirds of the voters authorize it, transportation may be provided for from the school funds. While common-school districts are not authorized to maintain high schools, such consolidated districts may maintain high schools as well as elementary schools. Comparatively little has been done toward consolidation under these statutes, although the law permitting consolidation has been on the statute books for 11 years." Since this was written the State legislature, in 1913, revised the laws on consolidated schools and now offers special State aid to urge consolidation. By January 1, 1914, 29 consolidated schools had been established. The main features of this law are given elsewhere in this bulletin.

Montana.—The movement for consolidation began in the State in Ravalli County in 1910. After an agitation lasting over a year, four districts united to form a consolidated district. Children were transported to a central building in six transportation wagons. Up to the present time no other consolidated schools have been reported.

Nebraska.—There are approximately 35 consolidated schools in the State, with transportation at public expense. They vary in size from two-teacher schools to five-teacher schools.

Nevada.—No reports of consolidated schools have been received.

New Hampshire.—"Consolidation of rural schools accomplished by transportation of pupils at public expense has been going forward in New Hampshire since 1885, the date of the abolition of the old school district system. It has never assumed the character of a universal policy, but, on the other hand, there is hardly a community in the State which has not done more or less of it.

"There have been two somewhat distinct possibilities before each of the several school boards: (1) To effect absolute consolidation—that is, bring all the children in the township together in a single large building having from four to eight rooms; (2) the other, to consolidate small one-room schools into larger one-room schools.

"The former policy has rarely been possible of accomplishment, due largely to the topography of the State. Four to five miles is the maximum distance which children may profitably be carried over hilly country. Otherwise a start must be made at an hour which is too early, and the return to the remoter homesteads is felt to be too late, especially for the younger children. This fact is ordinarily of itself sufficient to prevent absolute consolidation. However, in several townships favorably situated the plan is carried out. That is to say, either all the schools are consolidated into large buildings or into one large building with one or two distant one-room schools in remote and relatively inaccessible parts of the township.

"The other type of consolidation, namely, the consolidation of several small one-room schools into one large one-room school, has entered into the policy of nearly every town in the State. In the period 1885–1911 the reduction in the number of schools by consolidation has been about 25 per cent." (H. C. Morrison, State superintendent of public instruction.)

New Jersey.—"In New Jersey the State pays 75 per cent of the cost of the transportation of pupils, the remaining 25 per cent being paid from local district tax. The county superintendent of schools, who is appointed by the

commissioner of education, approves the necessity for transportation, and the cost and method thereof.

"The total amount spent for transportation during the year ending June 30, 1912, was \$185,099.46. The corresponding cost for transportation during the five years preceding, was as follows:

1905-6-----	\$11,888.04
1906-7-----	21,449.68
1907-8-----	67,840.44
1908-9-----	109,502.12
1909-10-----	145,736.86

"The law provides that consolidation of schools may take place if the majority of voters at a special election in each of the districts affected by the proposed consolidation approve. Under this law from 75 to 100 schools have been abandoned and consolidated with other schools or districts.

"In this connection it should be borne in mind that New Jersey is largely an urban State. In the rural districts, where consolidation is most needed, there is still much opposition to it, although in some sections the opposition has practically disappeared. Parents frequently, and in many cases persistently, object to sending their children, young children particularly, long distances from home. There is the further objection that the abandonment of the local school would damage the locality by removing the chief community center, and property would consequently depreciate in value. This opposition is strong enough to prevent consolidation in many sections where it is needed.

"However, public sentiment in the State as a whole is gradually becoming more favorable to the movement." (Calvin N. Kendall, State commissioner of education.)

New York.—"The education law of this State confers upon district superintendents the power to dissolve school districts and to annex the territory to adjoining districts. There is not in operation in this State the plan of consolidation of schools as such plan is understood in the central and western States. The general policy of this State has always been to maintain a public school wherever sufficient property and children can be brought together for such purpose and the people are willing to meet the necessary expenses incurred thereby.

"School districts may contract for the education of their children in adjoining districts, instead of maintaining a home school. When such contracts are made, a district which does not maintain a home school, but which contracts for the education of its children, is allowed the same apportionment from public funds as if it maintained a public school. This money may be used by the district for the payment of tuition and the cost of transportation. There were 475 districts in this State last year which maintained schools under the contract system.

"In addition to this plan, the State will pay high-school tuition for any child in the State meeting the requirements for admission to a high school and living in a district which does not maintain a high school. During the past year, the State paid the tuition of about 15,000 children who lived in districts which did not maintain high schools." (Thos. E. Finegan, assistant commissioner of education.)

North Carolina.—The State department has only partial statistics relating to the consolidation of schools in the State. More than 1,200 small districts have been abolished during the past 10 years, yet this has been done without the necessity for public transportation of pupils. A wider type of consolidation which renders necessary public transportation is now being favorably

considered by several of the most progressive county superintendents. In three counties a few wagons are used for the transportation of pupils.

North Dakota.—The movement for consolidation began in 1904, the first consolidated schools being established that year. In 1914 there were 271 legally consolidated schools in the State, 170 of which were located in villages and 101 in the open country. In addition there are 683 schools, each serving a large territory with pupils living more than $2\frac{1}{2}$ miles from the school. Of these 683 schools, 263 transport pupils at public expense. Only 53 of them are commonly spoken of as consolidated.

Ohio.—Information concerning consolidation in Ohio is given in the first pages of this bulletin.¹

Oklahoma.—

Number of common-school districts in Oklahoma.....	5,567
Number of consolidated districts in Oklahoma.....	91
Number of consolidated districts formed since July, 1911.....	22
Number of districts using transportation.....	42
Number of wagons used in transportation.....	130
Number of pupils carried in wagons.....	2,996
Cost of transportation for the year 1911-12.....	\$41,314
Number of counties having consolidated districts.....	35

Oregon.—There are several consolidated schools throughout the State. Stevens County, where more has been done than in any other county, reports 8 consolidated schools replacing 20 district schools.

Pennsylvania.—"Consolidation of schools is very difficult in the State of Pennsylvania as a whole, on account of the mountainous character of the State. Wherever pupils can be hauled to school within an hour and be brought back to their homes before dark the policy of transportation and consolidation has been successful, but under the most favorable circumstances there is a great deal of opposition to the closing of schools by reason of the inconvenience to which many pupils are subjected." (Nathan C. Schaeffer, State superintendent of public instruction.)

Rhode Island.—The question is of slight importance in the State, as only 7 per cent of the people are rural. The State superintendent reports: "The consolidation of schools in Rhode Island has almost ceased to be a problem. It has been carried nearly as far as possible."

South Carolina.—A "rural graded-school act," passed by the State legislature early in 1912, directly encourages consolidation. During the school year 1912-13, largely as a result of this act, 41 schools were discontinued on account of consolidation with other schools. There were 45 wagons used to transport children, 685 children being transported at public expense. Comparatively few consolidated schools had been established previously.

Tennessee.—The legislature in 1903 passed an act under which the school and civil districts were made coextensive and took the power to create school districts away from the county courts, where it had previously rested. The same act required that many small schools should be abolished. Under this provision it is estimated fully 1,000 small schools in the State were discontinued. In 1905 the legislature provided for the county unit of organization in several counties. In 1907 this was extended to all counties in the State. Since these acts the county boards of education have had control of all the schools in their respective counties, and consolidation has progressed. In 1911, in 37 of the 96 counties in the State, 65 new schools were established to replace 149 schools abandoned. The new schools served an average of 14 square miles each and had an average of 3 teachers. In 1913 there were 84 additional schools aban-

¹ See p. 13.

doned and replaced by 45 schools, each with 2 or more teachers. There are 28 schools in the State using school wagons.

Texas.—Little has been done toward consolidation in the State, although a beginning has been made in several counties. In 123 counties there have been 148 consolidations, resulting in the abandonment of 155 schools.

Utah.—The people of the State live almost entirely in villages and cities, and not on their farms. As a consequence there are practically no one-room schoolhouses. There are hardly more than 20 in the State. Consolidation, however, is taking place. Eight counties of the State are now organized into single-school districts, with all schools in each county under the control of a county board of education. This has resulted in the closing of small schools and the establishment of several consolidated schools with public transportation. The county board of education of Box Elder County, for example, during 1912-13 erected 11 new school buildings, at a total cost of \$205,000, to take the place of 30 old buildings; 20 wagons were put into operation to carry the children from the abandoned schools. The high-school work is all concentrated at one large school at Brigham City. Transportation to a maximum of \$2 a week is allowed students outside Brigham City, thus equalizing in part the cost of high-school education throughout the county.

Vermont.—No data is available relative to the extent to which consolidated schools have been established. An estimate may be made from the amount expended for transportation. In 1892 the first act was passed authorizing expenditure of school funds for transportation. Last year the expenditure was \$120,363. There are 421 unused abandoned rural schoolhouses in the State.

Virginia.—In 1906 there were in the State 7,320 schoolhouses, with 9,228 rooms; in 1912, 6,743 schoolhouses, with 10,730 rooms—577 fewer houses, with 1,502 more rooms. Over 200 transportation wagons are in use.

Washington.—"Practically all of the progress in the consolidation of rural schools in this State has been made during the past five years. Transportation of pupils is being done successfully in about 50 consolidated districts, scattered through about 20 counties of the State. More than 2,000 pupils are transported in this manner, at an average daily cost of \$2.60 per wagon. About \$50,000 is spent annually for this purpose. There are now (in 1912) in the State 120 consolidated schools, replacing 296 old districts." (J. M. Layhuc, assistant State superintendent of public instruction.)

West Virginia.—Owing to the mountainous character of so large a part of West Virginia, the transportation of pupils to centralized schools can never become universal throughout the State.

However, material progress has been made along the lines of transportation. The work is of two classes, namely, consolidation with transportation either by the public wagon, the trolley, or the steam railroad, and consolidation without transportation. Thus far consolidation with transportation has been put into effect principally in the northern panhandle of the State, the eastern panhandle, a section of the southeast near the Virginia line, and a small area in the north-central section of the State.

At Gary, in McDowell County, which is in the midst of a populous mining section, 10 schools have been consolidated into one. The new building is strictly fireproof, with glass roof, modern sanitary apparatus, and general equipment equal to that of the best city schools. This plant, including the land, will be worth from \$60,000 to \$75,000. A large percentage of the pupils are transported by wagons.

At Sherrard, in Marshall County, a centralized school costing \$40,000 has been completed. This school takes the place of the village school and four

one-room schools in the adjoining territory. Three wagons are employed to transport the pupils.

At places in Marion, Wetzel, and some other counties effective consolidation on a limited scale is carried on by means of the trolley lines running in various directions through the territory.

At Charles Town, in Jefferson County, in the eastern panhandle, is a school employing 17 teachers, which includes the grades and a high school. One-fourth of all the pupils in the school come from the surrounding country, all of them by private conveyance. A "pony brigade," made up of boys and girls who ride some distance, is a feature of the school.

The consolidated schools are uniformly better than the old, but as a rule they are not money-saving institutions. We have a number of cases, however, in which consolidation has not only brought better schools and better school conditions, but has actually worked a material saving in the cost of maintaining the schools. Rock district, in Mercer County, affords one of the most striking instances of this kind. At Montcalm, in this county, a four-room house has been built, which for the present year will easily accommodate the 75 pupils within a radius of 2 miles who were taught last year by six teachers in 2 two-room schools and 2 one-room schools. It will be seen that the salary of two teachers, as well as the additional fuel expense for two additional rooms, will be saved. Since the district maintains an eight-month term and pays an average salary of \$45 to \$50, the consolidation effected will save the district at least \$800 a year. At Mora, in the same district, a four-room house has been built to take the place of 3 two-room schools and 3 one-room schools, with their necessary nine teachers, all within a radius of $1\frac{1}{2}$ miles and enrolling but 80 pupils last year. The money saved here is more than double that in the case of Montcalm. There are other instances of consolidation in the district more or less striking. It has been found that 25 of the 100 teachers employed in that district may be dispensed with without any loss to the effectiveness of the work.

We are working out this process of consolidation to a greater or less degree in each county in the State. Of course, there are few places where the advantages of consolidation are as evident as in the instances cited.

In all more than 100 isolated schools have been abandoned within a year past. (M. P. Shawkey, State superintendent of free schools.)

Wisconsin.—The matter of consolidation has been agitated during the past few years and several consolidations have resulted. The two most notable cases of consolidation are those at Port Wing and at North Crandon, both in the northern part of the State. Four or five wagons are used in each district to transport the children to school. In each instance the territory of the district comprises the whole township. Other notable consolidations are at Brussels, Beetown, and Zenda. In these districts, however, transportation is not furnished. One or more cases of consolidation and transportation of children at public expense are found in each of 45 out of the 69 counties.

Wyoming.—No consolidation is reported from this State.

II. STATE LEGISLATION CONCERNING CONSOLIDATION AND TRANSPORTATION.

It is, of course, well understood that consolidation can make little progress without favorable school laws. In the following pages a summary is given of those now in force in each of the States on this subject and also on the question of transportation at public expense.

It will be noted that in only a few States are the education authorities given power to consolidate school subdistricts without first securing a favorable vote from the qualified voters in the districts affected. The county boards of education in Florida, Louisiana, North Carolina, and Tennessee have such power. The Maryland county board may close schools of less than 12 pupils. Within certain limits a few township boards in States where the township is the unit of administration have the same power. Usually, however, it requires a favorable vote at a meeting open to all voters in the township. Schools in Indiana whose average daily attendance falls below 12 in any year are closed at the end of the year by State law, and the children are cared for the following year in some other school, being conveyed to the school at the expense of the district. In the same way Louisiana schools with an average daily attendance of 10 are closed, those in Maine with an average daily attendance of 9, and in Ohio of 12. If the number of children of school age falls below 25 in any school district of New Mexico or below 20 in any district in Texas, the district must be abolished and included in neighboring districts.

The votes for or against consolidation in the great majority of States are taken in meetings held simultaneously in each district affected, and, to carry, must have a majority vote in every district. One district has often succeeded in preventing a consolidation which all others concerned wanted. In four States—New York, Minnesota, Iowa, and Missouri—the votes are not taken in the separate districts, but are taken at one central meeting of all the districts concerned, each district sending representatives. A majority vote of those present is sufficient to carry the measure, regardless of the districts in which those favorable or unfavorable to the movement live.

In nearly all States pupils may be transported to consolidated schools at the expense of the school districts. In several States school authorities may pay parents or guardians a fixed amount per day instead of furnishing transportation. South Dakota and Wisconsin are among the States that fix the amount that may be paid in accordance with the mileage pupils travel. Maine, Vermont, Minnesota, South Dakota, and Oregon permit payments for board and room for pupils in homes convenient to the schools where the cost of so doing does not exceed the cost of transportation.

In several States special State aid to stimulate consolidation is given. In most instances, however, such action is very recent, and time enough has not elapsed to show the results. Rhode Island allows any township which has consolidated three or more ungraded schools into a single graded school, with not less than 20 pupils in each department, the sum of \$100 annually for each department.

The State of Washington pays to each consolidated school approximately \$170 annually for every district abandoned to form the new district. Vermont appropriates an annual amount to be expended in reimbursing, in part, towns for moneys expended for transportation. Iowa appropriates money to purchase equipment and to assist in maintaining courses in agriculture, domestic economy, and other industrial subjects. Only consolidated schools may receive the benefits of this appropriation. Missouri voted in 1913 to pay annually to every consolidated school \$25 for each square mile in the consolidated district. In Tennessee 10 per cent of the general school funds is set aside for encouraging instruction in industrial subjects and assisting consolidated schools of three or more teachers. South Carolina and North Dakota divide consolidated schools into two classes, and a different amount of State aid is given to each. The regulations of North Dakota are given below in abbreviated form as an example of such regulations. The most important features of the laws on consolidation of Wisconsin and Minnesota are also presented below, since the regulations of these two States are worthy of special note.

Wisconsin gives aid for erecting and equipping the consolidated school building, and also annual aid for transportation. The enactments were passed by the 1913 legislature, so that time enough has not elapsed to determine the efficacy of the law. The Minnesota laws on consolidation were passed in 1911, and their effectiveness is explained on page 20. Minnesota defines three classes of consolidated schools; the amount of State aid received by a school depends upon its classification. It is an annual grant. In addition the State pays 25 per cent of the cost of the building. The Minnesota act is known as the Holmberg Act, and is reproduced in full, since it is of particular interest, and has been copied in part by several States.

(A) REQUIREMENT OF LAW AND OF THE NORTH DAKOTA STATE BOARD OF EDUCATION FOR CLASSIFICATION ON CONSOLIDATED SCHOOLS.

First class.—To be entitled to aid as a State consolidated school of the first class, the law and regulations of the board require:

1. School Term: Must be not less than nine months during the school year.
2. Attendance: The actual per cent of attendance for the school must be not less than 80; provided that each child between the ages of 8 and 15, inclusive, must attend school for the entire time that the school is in session, unless it can be shown to the satisfaction of the State board of education that the non-attendance is due to one of the following causes, viz (1) attendance elsewhere at some approved school; (2) extreme poverty or destitution of the family which the county has failed to relieve on being requested to do so by the family in question; (3) completion of the course; (4) physical or mental incapacity; and (5) lack of transportation beyond the 2½-mile limit.

3. Departments: Must be not less than four departments.

4. Teachers: The principal must be a graduate of a State normal school or higher institution of learning; he must hold a professional certificate; and must receive not less than \$90 per month. Each teacher must hold a first-grade elementary certificate or better, be a graduate of a standard four-year high-school course or equivalent, and must receive not less than \$65 per month. On and after July 1, 1914, each teacher must be a graduate of a standard four-year normal-school course or equivalent, and must receive not less than \$70 per month. All teachers must render efficient service of a high grade.

5. School Buildings: Must be suitable for school purposes, clean and well kept. Fire escapes and outswinging doors in the exits must be provided, as required by law. There must be at least 12 square feet of floor space and 200 cubic feet of air space provided for each pupil.

6. Equipment: Each department must be provided with encyclopedia, dictionaries, supplementary readers, maps, globe, desks, and seats, blackboards, drinking water, laboratory equipment.

7. Course of study: The common-school subjects, including elementary agriculture, as named in the law and outlined in the State course of study, must be taught. A two-year high-school course must be offered, as outlined in the high-school manual. This shall include a course in either sewing or cooking and a course in either manual training or agriculture, provided at least 10 qualified high-school pupils ask for same.

8. Library: Must have a well-selected library of at least 150 volumes, divided between general and reference.

In addition there are certain regulations regarding heating, ventilating, and lighting required, also concerning outhouses and school grounds.

Second class.—To be entitled to State aid as a school of this class the requirements are practically the same as for the first class, except that the school may have two or more departments instead of four or more.

(B) WISCONSIN SPECIAL STATE AID TO ASSIST IN ERECTING AND EQUIPPING
CONSOLIDATED SCHOOL BUILDINGS.

1. Whenever 15 per cent of the electors of any rural school district, and one or more contiguous school districts or subdistricts within or outside of an incorporated village, shall petition therefor, the respective school boards shall meet at a place designated by the school board of the petitioning district having the largest population to fix a time for an election to determine whether the district schools within the districts shall be consolidated. They shall fix the date of the election at not less than four nor more than eight weeks from the time of their meeting and notify the district clerks of the date. The district clerks of the respective districts and subdistricts shall post the notices of election as notices of school district meetings are posted. The elections shall be held by the school officers of the respective districts by written ballots. They shall report the result of the election in their respective districts to the clerk of the district in which the meeting to fix the time of the election is held, within three days after the election. The respective school boards, one week after the election, shall meet in the same manner and place as for calling the election and shall canvass the returns.

If a majority of those of each district voting at the election vote in favor of consolidating the district schools in their respective school districts, the territory included constitutes a consolidated rural school district.

The school boards at the time of canvassing the returns shall appoint a time and place for the first district meeting and shall post a written notice thereof

in at least three public places in each of the several districts or subdistricts which compose the consolidated school district.

2. A consolidated rural school district shall be deemed organized when any two of the officers elected at its first legal meeting file with the clerk of the meeting for canvassing returns, their written acceptances of the office to which they have been respectively elected, or when it has exercised the franchises and privileges of the district for the term of one year. A consolidated rural school district lawfully organized is a body corporate and possesses the usual powers of a public corporation, by the name and style of "Consolidated Rural School District No. _____ of _____" (the town or village, as the case may be, in which the school is located or proposed to be located). Such numbers shall be designated by the board or boards in the order of the formation of consolidated rural school districts. The board shall make its contracts in its corporate name.

3. When a consolidated rural school district shall be lawfully organized, the school districts or subdistricts out of which it shall have been formed shall cease to exist as school districts or bodies corporate, and the title to all property and assets of every nature of the several school districts and subdistricts out of which it was organized shall thereupon become vested in the consolidated rural school district, and all valid subsisting claims and obligations against and contracts of the said several school districts and subdistricts shall continue to be valid claims and obligations against them severally. All claims and obligations arising after the formation of a consolidated school district shall be against the consolidated school district. The consolidated rural school district shall maintain and conduct the schools theretofore maintained and conducted by the several districts and subdistricts, until such time as the consolidated rural school district shall have purchased or erected and equipped a building in which school can be conducted.

Consolidated rural school districts shall be entitled to and shall share in the distribution of the common school fund income and other school funds, in the same manner as school districts maintaining common and graded schools. In case a high school is maintained, the consolidated rural school shall be entitled to and share as in the case of union free high schools.

Special State aid partially to defray the cost of erecting and equipping a school building shall be granted to consolidated rural school districts as follows:

1. To a consolidated rural school district maintaining a school consisting of one department formed by the uniting of two or more school districts or subdistricts, one-half the cost, not to exceed \$500 to any one school.

2. To a consolidated rural school district maintaining a school consisting of a graded school of two departments, formed by the uniting of the schools of two or more school districts or subdistricts, one-half the cost, not to exceed \$1,500 to any one school.

3. To a consolidated rural school district maintaining a school consisting of a graded school of three departments, formed by the uniting of the schools of two or more school districts or subdistricts, one-half the cost, not to exceed \$2,000 to any one school.

4. To a consolidated rural school district maintaining a school consisting of a graded school of four or more departments, formed by the uniting of the schools of three or more school districts or subdistricts, one-half of the cost, not to exceed \$3,000 to any one school.

5. To a consolidated school district maintaining a school consisting of a graded school and a high school, formed by the uniting of all the districts and

subdistricts of a township, one-half of the cost, not to exceed \$5,000 to any one school.

All plans and expense accounts for additions to school buildings or for new buildings shall be submitted to the State superintendent. No State aid shall be granted unless the State superintendent has approved the plans when thus submitted.

(C) WISCONSIN SPECIAL AID TO ASSIST IN PROVIDING TRANSPORTATION TO CONSOLIDATED SCHOOLS.

The consolidated rural school district shall receive special aid for transportation upon complying with the following conditions:

1. Transportation shall be provided for at least 32 weeks.
2. The average daily attendance of the pupils transported from any districts or subdistrict to any consolidated rural school or State graded school or free high-school district must be 80 per cent of the entire number enrolled for transportation during each term of school.
3. Each driver contracted with must be of excellent moral character, trustworthy, and responsible, and must furnish a safe team with a suitable and comfortable conveyance, well supplied with protection against stormy and inclement weather.

It shall also be lawful for the electors to authorize the school board to enter into an agreement with the parent, guardian, or other person in charge of any pupil to compensate such parent, guardian, or other person, for transporting any pupil or pupils to and from school, and to enter into contracts for the transportation to and from school of all persons of school age who attend, and to levy a tax therefor. In all cases where the distance from the home of the pupil or pupils who are to be transported is 2 miles or less by the nearest traveled highway, the sum per pupil so paid shall be such as may be authorized by the electors; and in all cases where the distance is more than 1 and less than 2 miles, the State shall pay 5 cents per day, and where the distance is more than 2 miles, 10 cents per day for each pupil transported regularly to and from school in some reasonable and comfortable manner for a period of not less than five months. The school board or the town board of school directors and the principal teacher of the school in which such pupil is enrolled shall, on or before the 15th day of July of each year, make under oath a report giving the name and showing the distance and number of days each pupil was transported, the mode of transportation, and the total amount claimed by the districts on account of such transportation.

(D) LAWS RELATING TO CONSOLIDATION OF RURAL SCHOOLS IN MINNESOTA (THE HOLMBERG ACT), 1911.

Procedure for consolidation of school districts.—Two or more school districts of any kind may be consolidated, either by the formation of a new district or by annexation of one or more districts to an existing district in which is maintained a State graded, semigraded, or high school, as hereinafter provided.

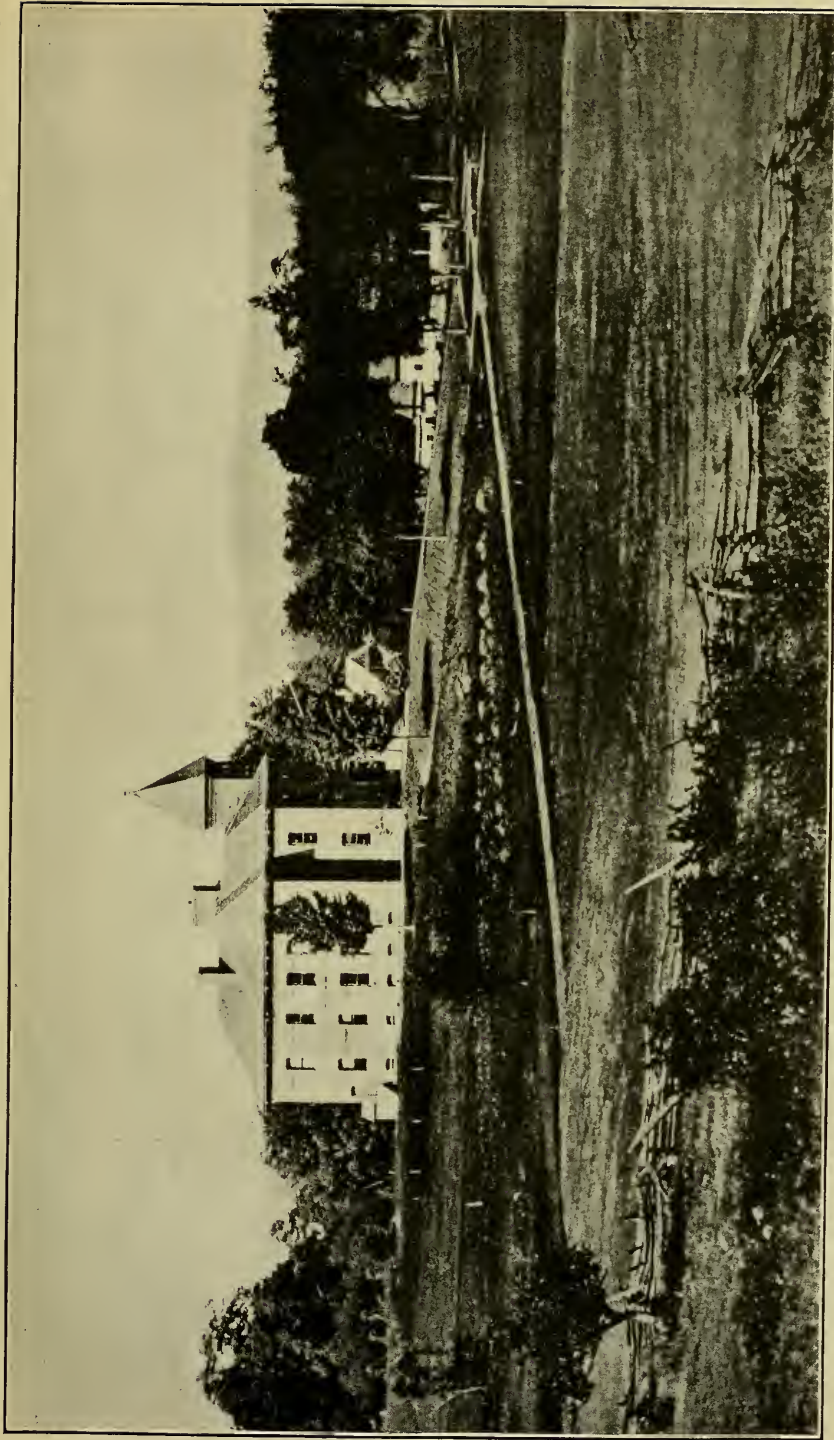
A district so formed by consolidation or annexation shall be known as a consolidated school district. Before any steps are taken to organize a consolidated school district the superintendent of the county in which the major portion of territory is situated from which it is proposed to form a consolidated school district shall cause a plat to be made showing the size and boundaries of the new district, the location of the schoolhouses in the several districts, the location of other adjoining school districts and of schoolhouses therein, together with such other information as may be of essential value, and submit the same to the superintendent of public instruction, who shall approve, modify,

or reject the plan so proposed and certify his conclusions to the county superintendent of schools. To receive State aid as a consolidated school of Class A or Class B, as defined in this act, the consolidated district must contain not less than 18 sections, and to receive State aid as a consolidated school of Class C, not less than 12 sections; but any existing school district of at least such area shall have the rights and privileges of a consolidated school district. A consolidated school district of less than 12 sections may be formed as herein provided, but shall not be entitled to receive special State aid as herein provided for. (Sec. 1, ch. 207, 1911.)

Duties of county superintendent.—After approval by the superintendent of public instruction of the plan for the formation of a consolidated school district, and upon presentation to the county superintendent of a petition signed and acknowledged by at least 25 per cent of the resident freeholders of each district affected, qualified to vote at school meetings, asking for the formation of a consolidated school district in accordance with the plans approved by the superintendent of public instruction, the county superintendent shall, within 10 days, cause 10 days' posted notice to be given in each district affected and one week's published notice, if there be a newspaper published in such district, of an election or special meeting to be held within the proposed district, at a time and place specified in such notice, to vote upon the question of consolidation. (Sec. 2, ch. 207, 1911.)

Election of officers.—At such meeting the electors, not less than 25 being present, shall elect from their number a chairman and clerk, who shall be the officers of the meeting. The chairman shall appoint two tellers, and the meeting and election shall be conducted as are annual meetings in common and independent districts. The vote at such election or meeting shall be by ballot, which shall read "For Consolidation" or "Against Consolidation." The officers at such meeting or election shall, within 10 days thereafter, certify the result of the vote to the superintendent of the county in which such district mainly lies; if a majority of the votes cast be for consolidation, the county superintendent within 10 days thereafter shall make proper orders to give effect to such vote and shall thereafter transmit a copy thereof to the auditor of each county in which any part of any district affected lies and to the clerk of each district affected and also to the superintendent of public instruction. If the order be for the formation of a new district, it shall specify the number of such district. The county superintendent shall also cause 10 days' posted notice and one week's published notice, if there be a newspaper published in such district, to be given of a meeting to elect officers of the newly formed consolidated school district: *Provided*, That a consolidated district shall upon its formation become an independent district, with the powers, privileges, and duties now conferred by law upon independent districts. After the formation of any consolidated school district appeal may be taken as now provided by law in connection with the formation of other school districts. Nothing in this act shall be construed to transfer the liability of existing bonded indebtedness from the district or territory against which it was originally incurred. (Sec. 3, ch. 207, 1911.)

Consolidation with other districts.—In like manner, one or more school districts may be consolidated with an existing district in which is maintained a State high, graded, or semigraded school, in which case the school board of the district maintaining a State high, graded, or semigraded school shall continue to be the board governing the consolidated school district until the next annual school meeting, when successors to the members whose terms then expire shall be elected by the legally qualified voters of the consolidated school district: *Provided, however*, That in the case of consolidation with a school district in which there is maintained a State high or State graded school, con-



THE MONTAGUE (MASS.) HIGH AND CONSOLIDATED SCHOOL.

Probably the first "consolidated" school in the United States.



A. THE CEDRON (LA.) SCHOOLHOUSE.

Built to replace 3 one-teacher schools.

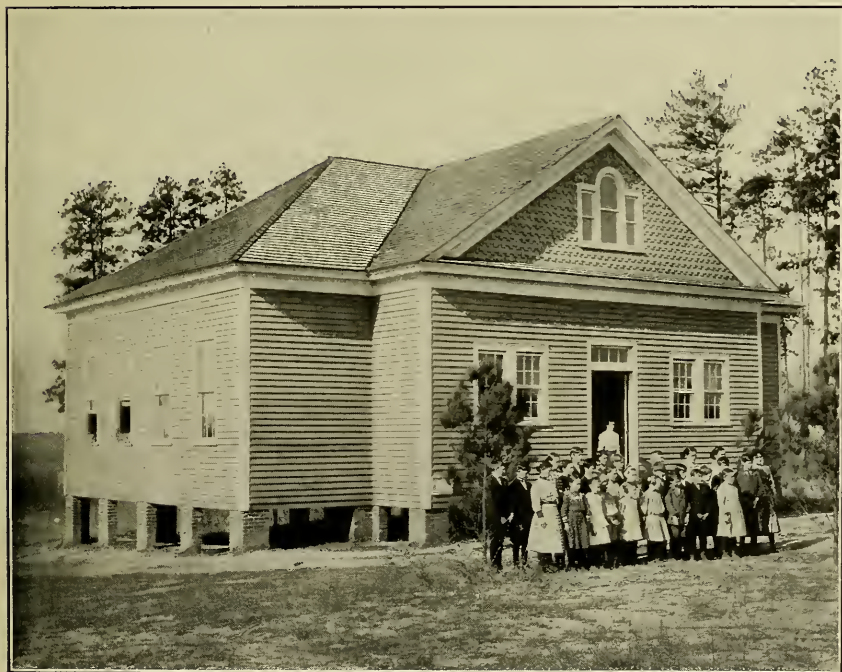


B. MEDFORD CONSOLIDATED SCHOOL, MEDFORD, MINN.

Formerly combining 6 one-room schools. Enrollment has more than doubled in three years.



A. A MOUNTAIN CONSOLIDATED SCHOOL OF TWO ROOMS, CLAY COUNTY, KY.



B. A SOUTH CAROLINA UNION SCHOOL, AIKEN, S. C.

solidation shall be effected by vote of the rural school districts only, in the manner provided under this act, and by the approval of such consolidation of the rural district or districts with the one in which there is maintained a State high or graded school, by the school board thereof. (Sec. 4, ch. 207, 1911.)

Certificate by officers.—The officers of the several districts forming a consolidated school district shall within 10 days from receipt of copy of the order of the county superintendent certifying the formation of the new district, or immediately after the election and qualification of members of the school board in the consolidated school district, turn over to the proper officers of the newly elected school board, or to the proper officers of the school board in the district maintaining the State high or graded school, all records, funds, credits, and effects of their several districts. (Sec. 4, ch. 207, 1911.)

Powers of consolidated board.—For the purpose of promoting a better condition in rural schools and to encourage industrial training, including the elements of agriculture, manual training, and home economics, the board in a consolidated school district is authorized to establish schools of two or more departments, provide for the transportation of pupils, or expend a reasonable amount for room and board of pupils whose attendance at school can more economically and conveniently be provided for by such means, locate and acquire sites of not less than 2 acres, and erect and equip suitable buildings thereon, when money therefor has been voted by the district. They shall submit to the superintendent of public instruction a plat of the school grounds, indicating the site of the proposed buildings, plans and specifications for the school building and its equipment, and the equipment of the premises.

It shall be the duty of the superintendent of public instruction, with respect to schools in consolidated districts, to approve plans of sites, of buildings and their equipment, and the equipment of the premises, to prepare suggestive courses of study, including an industrial course, to prescribe the qualifications of the principal and other teachers, and through such supervisors as he may appoint and in connection with the county superintendent, exercise general supervision over said consolidated schools. (Sec. 6, ch. 207, 1911.)

Procedure for receiving State aid.—(1) For the purpose of receiving State aid, schools in consolidated districts shall be classified as A, B, and C. They shall be in session at least eight months in the year and be well organized. They shall have suitable schoolhouses, with the necessary rooms and equipment. Those belonging to class A shall have at least four departments, those of class B three departments, and those of class C two departments. The board in a consolidated school district maintaining a school of either class shall arrange for the attendance of all pupils living more than 2 miles from the school through suitable provision for transportation, or for the board and room of such as may be more economically and conveniently provided for by such means.

2. The principal of a school coming under class A shall hold at least a diploma from the advanced course of a State normal school and be qualified to teach the elements of agriculture, as determined by such tests as are required by the superintendent of public instruction. A school of this class shall have suitable rooms and equipment for industrial and other work, a library, and necessary apparatus and equipment for efficient work, and a course of study embracing such branches as may be prescribed by the superintendent of public instruction.

3. The principal of a school coming under class B or C shall hold at least a State first-grade certificate, and in other respects these schools shall comply with the requirements of schools under class A, so far as this may be practi-

cable, in accordance with requirements fixed by the superintendent of public instruction. Teachers other than the principal, including special teachers, shall possess such qualifications as are required of teachers in State graded schools.

4. Besides maintaining schools in consolidated districts conforming to the requirements of those coming under classes A, B, and C, the school board may maintain other schools of not more than two rooms and receive State aid for these as provided for semigraded and rural schools. (Sec. 7, ch. 207, 1911.)

Aid for the various districts.—Schools under class A in consolidated districts shall receive annually State aid of \$1,500; those under class B, \$1,000; those under class C, \$750; and in addition to such annual aid a school of any of the above classes shall receive an amount to aid in the construction of a building equal to 25 per cent of the cost of said building, but no district shall receive more than a total of \$1,500 for aid in the construction of buildings. The annual aid and the aid for building shall be paid in the same manner as now provided by law for the payment of other State aid to public schools. Whenever any school in a consolidated district attains the rank of State high or graded school, it shall possess the rights and privileges of such school. (Sec. 8, ch. 207, 1911.)

The above act providing a new law for the consolidation of schools went into effect April 18, 1911. It differs from the previous law chiefly in the following provisions:

1. Petition for a vote upon consolidation is binding upon a district if signed by 25 per cent of the resident freeholders of the district. Under the former law a majority was required.

2. Consolidation is now voted upon at one polling place for all districts petitioning and is carried by a majority of all the votes cast. The old law left each district petitioning to vote separately.

3. The new law permits a district to receive aid under the law, provided it already possesses the requisite minimum area established for a consolidated district and complies with all the other requirements as to building, equipment, qualification of teachers, industrial courses, and transportation.

4. It establishes the same standards for teachers in consolidated schools as for those in high and graded schools in villages and cities.

5. It provides that principals of consolidated schools, in addition to meeting the regular professional requirement, must secure the special indorsement of the State superintendent as to fitness for the particular position sought.

6. The new law requires the maintenance of instruction in agriculture, manual training, sewing, and cooking in every aided school.

7. It authorizes the State superintendent to establish requirements as to building and equipment and also concerning transportation.

8. Finally, the Holmberg Act provides for generous State aid, the purpose of which is to make it possible for rural communities to maintain for their children graded and high schools as good in every respect as those in urban communities, and at no greater cost than that in such communities.

(E) SUMMARY OF STATE LAWS ON CONSOLIDATION.¹

Alabama.—(County.) No definite law on consolidation nor on transportation. County boards of education have full power to fix boundaries of school

¹ The word in parentheses (county, township, or district) given after the name of each State indicates the unit of organization for the administration of the rural school affairs in the State. Where "district" is used, it refers to the single district, usually the territory served by one school. Where two terms are used, it means that part of the State is on one basis, part on the other.

districts after holding a public hearing advertised three weeks in local papers and by posters in district affected.

Arizona.—(District.) Two or more school districts may be consolidated into one district provided that 15 per cent of the school electors of each district present a petition to the county superintendent asking an election in each district and the majority of votes cast in each district is in favor of consolidation. Trustees of any district may call an election to determine whether transportation shall be provided, and upon petition of 15 per cent of the school electors they must call such a meeting. Only children living at a greater distance than 1 mile from the school may be transported at public expense.

Arkansas.—(District.) An act to provide for the consolidation of adjacent districts was passed in 1911. The school directors in each district to be included in a proposed consolidation may, and upon the petition of 10 per cent of the school electors must, submit the question of consolidation to the electors of the district either in the annual meeting or in special meetings. The consolidation is effected if the majority of voters of each district vote for consolidation. The directors of the districts abandoned become the directors of the consolidated district until the regular annual election, when six directors are chosen at large from the new district. These directors are given full authority over the school and may provide transportation at the expense of the district if they deem it advisable to do so.

California.—(District.) When a majority of the heads of families who reside in two or more contiguous school districts and who have children attending school unite in a petition to the county superintendent for the formation of a union school district the superintendent must call an election in each district, to be held simultaneously. To effect the union the majority in each district must vote for it. If the vote is favorable to consolidation, each district elects one representative to a joint committee that, with the county superintendent, determines the location of the new union school or schools. If the board can not agree, then a general election is held to determine the site; only such sites as have been named by the district representatives may be voted upon. The representatives mentioned above constitute the union district board until the time of the annual meeting, when a regular board of trustees is elected. This board is composed of one person from each of the old school districts. It is given full control over the school or schools and may provide public transportation at public expense in such manner as it may deem best.

Colorado.—(District.) The school boards of two or more adjoining districts may, and upon the petition of not less than one-fourth of the qualified electors must, submit the question of consolidation to a vote of the qualified electors in each district. If the majority vote in each district is in favor of consolidation, a union meeting is held, called by the school board in the district with the largest school census, and a board of directors of three persons elected. These directors select the site for the consolidated school, erect the building, and manage the school. They may furnish public transportation to children living more than 1 mile from school.

Connecticut.—(Township.) The town (township) school committee have full control of all schools in the town. "They shall maintain in these several towns good common schools * * * at such places * * * as in their judgment shall best subserve the interests of education. * * * They shall designate the schools which shall be attended by the various children within these several towns * * * and they may provide for the transportation of children wherever transportation may seem reasonable and desirable."

Delaware.—(District.) The manner of forming a union of subdistricts is as follows: In each subdistrict a meeting is held, and the legal voters present

vote for or against consolidation. If two-thirds of those present favor consolidation, a committee of three voters is appointed to meet with similar committees from the other districts and arrange the terms of consolidation. Each committee reports to an adjourned meeting in its district. If the report is accepted by a two-thirds vote of the voters present, it is obligatory. One district failing to accept the report does not prevent the others from uniting.

Florida.—(County.) The county board of public instruction is given power "to locate and maintain schools in every locality in the county where they may be needed." Schools may not be located nearer than 3 miles to each other unless for some local reason or necessity.

Georgia.—(County.) The 1911 legislature provided that the county board of education in any county "shall have the right if, in their opinion, the welfare of the schools of the county and the best interests of the pupils require, to consolidate two or more schools in the same or different districts into one school located as near the center of the new district as possible." They may also form new districts, including part only of existing districts. Should objection be made by as many as 10 of the patrons of any school to be affected by the consolidation, the county superintendent must call an election which shall determine by majority vote whether or not the consolidation will be made. The county boards may furnish public transportation to consolidated schools.

Idaho.—(District.) The board of county commissioners may unite two or more contiguous districts upon petition of a majority of the heads of families, provided that the plan for the consolidated district has first been indorsed by the State board of education. The school trustees of any consolidated district may provide, out of the regular school funds, for the conveyance of pupils. Other large districts maintaining central schools may provide transportation at public expense.

Illinois.—(District.) While the district is the unit of organization which holds the balance of power, some school administrative functions rest with the townships. Township trustees are elected whose principal duties concern finances and the regulation of the district boundaries. The township trustees may consolidate two or more districts when petitioned by a majority of the legal voters of the districts.

Indiana.—(Township.) Whenever a majority of the legal voters of any school district petition the trustee or trustees for consolidation, it shall be the duty of the trustee to consolidate. No township trustee may abandon any district school in his township until he has procured the written consent of a majority of the legal voters in the school district. This does not apply to schools with an average daily attendance of 12 pupils or less. By State law a school whose average daily attendance during the year is 12 or fewer pupils is closed at the end of the year and the trustee must provide for the education of the pupils of the district in some other school. Transportation for all children living 2 miles or more from the school which they are to attend must be provided and also for pupils between the ages of 6 and 12 who live more than 1 mile from the school. The law requires the drivers of school wagons to furnish the teams and to maintain discipline while the children are in the wagons.

Iowa.—(District.) When one-third of the electors residing in a contiguous territory containing not less than 16 sections petition for the establishment of a consolidated district, a public meeting must be held at which all electors in the proposed consolidated district shall be entitled to vote by ballot for or against consolidation. A majority vote is required to consolidate. A school board is elected at large from the new district. The school board is required to furnish suitable transportation to and from school. The school wagons

are not required to leave the public highway to receive or discharge occupants. Children living any unreasonable distance from school may be transported by parents or guardians to the school or to a school wagon route, and the school board is authorized to allow a reasonable amount of compensation for such transportation.

To encourage the movement for consolidation a special State aid was provided by the legislature of 1913. Under the provisions of this act three-room buildings receive from the State government \$350 toward equipment and \$500 annually, provided they maintain departments for teaching agriculture, home economics, and manual training or other industrial subjects and employ teachers holding State certificates showing that they are qualified to teach such subjects. Four or more room buildings receive \$500 for equipment and \$750 annually.

Kansas.—(District.) The county superintendent may, when any two or more adjoining school districts have less than five pupils, combine the pupils of such districts in a single school. The district school board may call a meeting of any school district at the schoolhouse, or such a meeting must be called when 25 per cent of the voters petition for it, to vote upon a proposition of consolidation with other school districts. When two or more districts vote to combine the county superintendent designates a time and place for a union meeting for the purpose of electing a school board of three members for the new district. The district board of consolidated school districts must provide comfortable transportation for pupils living 2 or more miles from the school.

Kentucky.—(County.) The county board of education, by act of the legislature of 1912, is empowered to fix a boundary including a number of school districts, and to submit to the voters within that boundary the proposition of a tax sufficient to provide for consolidation of the schools within the boundary and for transportation of pupils.

Louisiana.—(County.) The parish (county) board of education is authorized by law to determine the number of schools to be opened each year in the parish and the location of the schoolhouses. They may change the location of any schoolhouse whenever they see fit to do so. They are forbidden to maintain schools of less than 10 pupils.

Maine.—(Township.) Any town (township) at its annual meeting, or at a meeting called for the purpose, may determine the number and location of its schools and may discontinue them or change their location, but such discontinuance or change of location may be made only on the written recommendation of the superintending school committee. Any school failing to maintain an average attendance of at least eight pupils shall be abandoned at the close of the school year. The superintendent of schools in each town shall procure conveyance of all common-school pupils to and from school when such pupils reside at such distances from the school as, in the judgment of the superintending school committee, shall render such conveyance necessary. The school committee, however, may authorize the superintendent of schools to pay for board and room at a suitable place near any established school instead of providing conveyance, when it can be done at an equal or less expense.

Maryland.—(County.) The county board of school commissioners have general supervision and control of all schools in their counties. The law gives the board authority to consolidate schools when in its judgment consolidation is practicable and desirable, and to arrange for and to pay charges of transporting pupils to and from such schools. The board, however, can not close a school with a yearly average of 12 pupils or over without the consent of 60 per cent of the patrons of the school.

Massachusetts.—(Township.) The town (township), at regular or special town meetings, determines the location of its schoolhouses. Money may be appropriated at town meetings for the transportation of pupils to public schools; street cars and railroads are required to transport pupils to public schools at half the regular fare charged for other passengers.

Michigan.—(District and township.) Authority to regulate the boundaries of school districts is left with the township board which has general charge of all township affairs. This board may consolidate two or more districts, but not without the consent of a majority of the resident taxpayers of each district. In the upper peninsula, which is organized on the township basis, and in a few districts in the lower peninsula on the same basis, the township board of education is given power to locate the school buildings. When school buildings are so located that some children live an unreasonable distance from the building, transportation may be provided.

Minnesota.—(District.) Two or more school districts of any kind may be consolidated, either by the formation of a new district or by annexation of one or more districts to an existing district in which is maintained a State graded, semigraded, or high school. The plan must be first approved by the State superintendent of public instruction; it is then voted upon by the freeholders of each district affected. The board of education of the consolidated district may provide for the transportation of pupils or may expend a reasonable amount for room and board of pupils whose attendance at school can more economically and conveniently be provided for by such means. (See p. 31.)

Mississippi.—(County.) The county board of education fixes the boundaries of school districts. No regular district school can be erected with less than 45 children of school age. If the attendance at any school in a district is less than 5, the school must be discontinued by the county superintendent at the end of the month. The county board of education may consolidate schools whenever it sees fit, and it is empowered to provide means of transportation for pupils living 2 miles or more from the school. On petition of the majority of the qualified electors of a consolidated school district containing not less than 25 miles square, a special tax may be levied on the property of the district to pay the cost of transportation. The consolidated schools have all the privileges granted to separate school districts.

Missouri.—(District.) The school code has provided for consolidation for several years, but comparatively little has been done. In the 1913 legislature the Buford-Colley consolidation law was passed. This provides that when the resident citizens of any community desire to form a consolidated school, a petition signed by at least 25 qualified voters of said community shall be filed with the county superintendent. The county superintendent is then required to inspect the community and determine the exact boundaries of the proposed consolidated district. He then calls a special meeting of all the qualified voters of the proposed consolidated district, at which a vote is taken by ballot to determine whether or not the consolidation shall be effected. A majority vote of those present, regardless of the subdistricts in which they live, is all that is required to adopt the consolidation.

Transportation may be voted upon at the same meeting. If it is not provided, the board of directors of the consolidated district must maintain an elementary school within $2\frac{1}{2}$ miles of every child of school age in the district. Special State aid, equal to \$25 per year for each square mile in the area of the consolidated district, is provided.

Montana.—(District.) Two or more school districts may be consolidated, either by the formation of a new district or the annexation of one or more

districts to an existing district. Whenever the county superintendent of schools receives a petition signed by a majority of the resident freeholders of each district affected, asking for consolidation, he holds an election in each district, to vote for or against consolidation. A majority vote in each district is necessary to carry the measure. The trustees of any school district in the State of Montana, when they deem it to be for the best interests of all pupils, may expend school money for the transportation of children to public schools.

Nebraska.—(District.) A school district may be discontinued and its territory attached to other adjoining districts by the county superintendent, upon petition signed by half the legal voters in each district affected.

“Suppose districts Nos. 1, 2, 3, 4 of a certain county desire to consolidate with district No. 5. Separate petitions must be circulated in each of these districts 1, 2, 3, 4, asking to be discontinued and to have its territory attached to district No. 5, which district shall retain its own number. Four separate petitions must also be circulated in district No. 5; one asking that the territory in district No. 1 be attached to district No. 5; one asking that the territory in district No. 2 be attached to district No. 5; one asking that the territory in district No. 3 be attached to district No. 5; and one asking that the territory in district No. 4 be attached to district No. 5. The consolidated district shall take the number of the said district No. 5, the new district not only becoming invested of the property rights of the old, but also answerable for their debts. The county superintendent is given large discretionary power. However, he can not refuse to change the boundaries of a school district when asked to do so by petition signed by two-thirds of the legal voters of the district affected.”

Any district board of any school district in the State of Nebraska, when authorized by a two-thirds vote at any annual or special meeting, may make provision for the transportation of pupils. The 1913 legislature has provided special State aid to assist in maintaining a school term of at least seven months. Such aid shall be given, however, to no district containing less than 12 sections of land for each school maintained. No district formed after the passage of this act may receive State aid under its provisions unless it contains at least 20 square miles of territory.

Nevada.—(District.) The board of county commissioners in any county, upon the recommendation of the State deputy superintendent of public instruction and without formal petition, may enlarge the boundaries of any school district, wherein there may be uncertainty of maintaining the minimum requirements of five census children, sufficiently beyond the 16-miles-square limit to include five or more census school children, and upon recommendation of the deputy superintendent, may consolidate two or more school districts or parts of districts into a single district. When such consolidation is effected the deputy superintendent appoints a board of trustees and determines the location of the school.

On the recommendation of the deputy superintendent, the boards of school trustees of any contiguous school districts may, in joint meeting of the two boards, unite the two districts and establish a union school to be supported out of the funds belonging to the respective districts. The school is governed by the two boards.

New Hampshire.—(Township.) The township boards are required to provide schools at such places as will best subserve the interests of education. They may use a portion of the school money, not exceeding 25 per cent, for conveying pupils to and from schools. Any town may raise money for the purpose of purchasing transportation wagons.

New Jersey.—(Township.) The township board of education determines where schools shall be located. Two townships may consolidate into a single

district upon majority vote of the legal voters in each district. A board of education representing each district is selected.

New Mexico.—(District.) No school district may be created with less than 25 children of school age. The county superintendent is required to consolidate school districts on the presentation of separate petitions signed by a majority of electors residing in the respective districts affected.

Whenever the number of children of school age has been reduced below 15 in any district, the superintendent is empowered to disorganize the district and attach the territory to an adjoining district. Appeal may be made to the board of county commissioners from the decision of the county superintendent on the change of boundary lines.

New York.—(District.) The 1913 legislature made the following provisions for consolidation: Two or more common-school districts may be created as one district, or a common-school district and a union free-school district may be created as a union free-school district by a majority vote of the qualified electors in the districts affected. Whenever 10 or more electors of each of the districts affected sign a request for a meeting to be held for the purpose of determining whether such districts shall be consolidated, the trustees must call a meeting at which there must be present at least 10 qualified electors of each of the districts affected. If a majority of those present vote in favor of consolidation, the measure is adopted, and the district superintendent issues an order consolidating the districts.

North Carolina.—(County.) The county board of education divides the townships into convenient school districts. The board is prohibited from establishing new schools in any township within 3 miles of schools already established, or from creating a school district with less than 65 children, unless such district contains at least 12 square miles of territory. It may form a school district out of portions of two or more contiguous townships. It is authorized to consolidate two or more school districts into one district and to secure facilities for transporting children to school. The daily cost of transportation, however, can not exceed the daily cost per pupil of providing a separate school in a separate district.

North Dakota.—(Township and district.) The boards of education, whether district boards or township boards, are authorized to organize, maintain, and conveniently locate schools under the following regulations: Each board must call a meeting of the voters of the district to decide by vote upon the question of the selection, purchase, or sale of school sites and schoolhouses. If the district, whether a single district or a township district, maintains more than one school, the schools may be consolidated by action of the voters of the district. At the same meeting it is determined by vote whether or not pupils shall be conveyed at public expense to the school. The election may be called by the board on their own volition or upon the presentation of a petition signed by one-third of the voters in the district. Two or more separate adjacent districts may unite on the majority vote of each district.

The State legislature of 1913 defined consolidated schools and divided them into first and second class schools. It provided also special State aid according to the grade of the school. (See p. 28.)

Ohio.—(County, with township and village subdistricts.) The Ohio school laws, adopted in 1914, provided that the township and special school districts existing at the time the law was passed shall constitute rural school districts until changed by the county board. A district may be dissolved and joined to a contiguous rural or village district by a majority vote of each district.

The question of centralization of the schools within a district may be brought before the people by the district board of education in three ways—upon its

own volition; upon the receipt of a petition signed by at least one-fourth of the voters of the district; upon the order of the county board of education. A majority vote carries the question. A vote to dissolve the consolidation can not be legally held for three years. If a meeting votes not to consolidate, the question can not be legally voted upon again until two years have elapsed.

When the average daily attendance of any school for the year falls below 12 the district board of education must provide for the transportation of the pupils to another school for the following year.

In all rural and village districts free transportation must be furnished for all children living 2 miles or more from the school. It may be furnished for pupils living nearer than 2 miles upon the option of the school board. Children may be required to walk $\frac{1}{2}$ mile to meet the school wagons.

Oklahoma.—(District.) Meetings of the voters of any two or more adjacent school districts may be called in their respective districts to vote upon providing a consolidated school. A majority of the votes in each district must be in favor of the movement before consolidation shall be effected. The district board of directors are required to furnish transportation for all pupils living $1\frac{1}{2}$ miles or more from the school.

Pennsylvania.—(Township.) The school code adopted in 1911 provides that the township boards of school directors may consolidate public schools in their districts. They must, however, provide in all rural districts free transportation of pupils living $1\frac{1}{2}$ miles or more from the school. An act passed April 13, 1911, provides as follows:

That whenever graded schools can be made to accommodate the pupils of one or more ungraded schools by consolidating such ungraded school or schools with another school, either graded or ungraded, it shall be the duty of the school directors to abandon the one-room school or schools, and, instead of rebuilding or repairing the one-room schoolhouse or schoolhouses, they shall erect a suitable modern building for the purpose of consolidating and properly grading all of the said schools: *Provided*, That no pupils of the abandoned schools shall be required to walk more than $1\frac{1}{2}$ miles to the new school building.

Oregon.—(District.) Consolidation is effected by the majority of votes of the school electors in each district to be included in the proposed consolidation. The district school board of any legally organized district shall, when authorized by a majority vote of the legal voters of the district, furnish transportation to pupils living more than 2 miles from the school building. However, in their discretion they may pay the board of any pupil at any suitable place near the school, instead of providing conveyance, when it can be done at an equal or less expense than by conveyance. Any district may vote to suspend its school and transport children to another district if it sees fit to do so.

Rhode Island.—(Township.) The school committee of any town (township) may, with the approval of the State commissioner of public schools, consolidate any schools the average number of pupils belonging to each of which is less than 12. Each town in town meeting may determine to erect additional school buildings or to consolidate existing schools. In case any town consolidates three or more ungraded schools and maintains a graded school of two or more departments with not less than 20 pupils for each department, the State will pay to such town \$100 annually for each department. Town school committees are authorized to provide transportation at public expense.

South Carolina.—(County.) The 1912 legislature provided \$15,000 State aid to encourage the movement for consolidation in country districts. To receive the benefit of this act, a rural district must levy and collect a school tax of not less than 4 mills, employ at least two certified teachers for a school term of not less than six months and have an enrollment of not fewer than 50 pupils and an average daily attendance of not fewer than 30 pupils who must be

taught in a building approved by the State department of education. It may receive \$200 per year. If the district employs three teachers and has an enrollment of 75 pupils with an average daily attendance of not less than 40, it may receive State aid amounting to \$300 per year.

School districts may be consolidated by the county board of education upon the petition of at least one-third of the qualified voters of the district proposed to be consolidated. School trustees of a consolidated district receiving State aid, under legislative enactment mentioned above, may use such funds to pay for transportation if they desire to do so.

South Dakota.—(District.) School districts may be combined into single township districts by the county commissioners upon the receipt of a petition signed by the majority of electors of the districts. A township board of education is then appointed and schools may be consolidated. The 1913 legislature provided that if two or more adjacent school districts wish to consider consolidation, the county superintendent is required to make a map of the proposed consolidated district, showing the location of the schoolhouses in the several districts, the proposed location of the new school, the location of transportation routes, and submit the same to the State superintendent for approval or rejection. When the plans have been approved, the county superintendent, provided that he has a petition signed by at least 25 per cent of the voters of each district, calls a public meeting at which a vote is taken for or against consolidation. If three-quarters or more of the votes cast ask for consolidation, the vote carries.

The board of education of the consolidated school district is authorized to provide for the transportation of pupils, and is required to transport pupils living a greater distance than 2 miles from the school. Instead of providing transportation, the board may make arrangements with the parent, guardian, or other person, to transport such children as may live more than 2 miles from the school. Children shall not be required to walk more than five-eighths of a mile from their homes to the transportation route.

District boards of education as well as boards of consolidated districts are permitted to furnish transportation or may pay to the parent, guardian, or pupil a certain sum of money in lieu of transportation. For pupils residing more than $2\frac{1}{2}$ miles and less than 3 miles from the schoolhouse, the guardian or pupil shall receive from his school district 10 cents per day for each pupil; if more than 3 miles and less than 4 miles, 20 cents per day; if more than 4 miles and less than 5 miles, 30 cents per day; if more than 5 miles, 40 cents per day. If there are two persons in the same family, the rate per day is less. No township or district may expend more than \$800 for transportation in one year. Whenever children of school age reside in a territory not organized into a school district, the county commissioners shall pay their tuition and transportation to some school in an organized district. In lieu of transportation they may expend a reasonable amount for room and board of such pupils.

Tennessee.—(County.) By act of the legislature in 1913 the county board of education is given full power and authority to consolidate two or more schools and to furnish transportation to pupils who live too far to walk to school. Special State aid is given to consolidated schools of three or more teachers.

Texas.—(District.) The county superintendent has power to close the school in any district with less than 20 pupils of scholastic age and consolidate with an adjoining district. The county commissioners' court may, at any time they deem necessary, consolidate two or more adjacent school districts. The county high-school board of education, by and with the consent of a majority

of all trustees in each common-school district affected, may consolidate any number of common-school districts to establish a high-school district. The high-school district becomes a consolidated district in every sense of the word. The old districts cease to exist, and the schools may be closed and the children transported to a centralized school maintained in connection with the high school.

Utah.—(District and county.) In the counties organized on the district basis, the board of county commissioners has power to consolidate schools. In counties organized on the county basis the county board of education has full power to locate schools wherever it wishes. It may sell present school sites and provide consolidated schools in its discretion.

Vermont.—(Township.) The township board of school directors are authorized to locate schools wherever they deem best. They may provide conveyance of pupils at the expense of the town or may pay, in lieu of transportation, a reasonable sum for the board of pupils while attending school. A special State appropriation is divided among the towns furnishing transportation to pay part of the expenses of the conveyance of pupils to public schools.

Virginia.—(Magisterial district.) The magisterial district board is given power to locate schoolhouses wherever it deems advisable, provided the site, location, plans, and specifications are approved by the division superintendent of schools. The board is also authorized to provide consolidated schools and public transportation. The boards are directed by the State board of education in the published regulations of the State board "to use their best influence in preventing a multiplicity of schools, particularly of small ungraded rural schools, and to urge wherever possible the consolidation of small schools into larger schools with two or more teachers."

Washington.—(District.) Upon a petition signed by five heads of families of two or more adjoining districts in the same county, the county superintendent may organize and establish a consolidated school district. Consolidated districts receive special State aid. In apportioning State funds, the consolidated district is credited with 2,000 days' attendance in addition to the actual attendance for each district, less one, so consolidated. (See p. 27.)

West Virginia.—(Magisterial district.) Magisterial boards of education may, upon the petition in writing of 75 per cent of the voters of the subdistricts affected, abolish any such subdistrict and consolidate the school or schools therein and provide for the conveyance of pupils.

Wisconsin.—(County.) Two or more school subdistricts may be consolidated by a favorable vote of each district affected. State aid is given for assisting in providing suitable buildings, also for providing transportation. (See p. 29.)

Wyoming.—(District.) The county district boundary board may at any time annex the territory of a school district having less than eight pupils to a contiguous district. The same board may also unite two school districts upon the petition signed by the majority of the voters in the districts affected.

III. TRANSPORTATION ARRANGEMENTS AND COST.

Authority is given to school officers by the State legislatures in at least 43 States to expend public funds for the transportation of children to schools, provided the children live outside of a reasonable walking distance. Such authorization is necessary before large con-

solidated districts can be established. Consolidated districts of from 9 to 12 square miles may be established without transportation.

The regulations fixed by the States are given in brief in the section of this publication beginning on page 34. In certain States transportation at public expense is permissive only, in others obligatory. Ohio, for instance, requires free transportation to be furnished to all children living 2 miles or more from the school. Children living nearer may be conveyed free at the option of the school board. In Missouri free transportation must be provided to children living $2\frac{1}{2}$ miles or more from a school. Colorado school districts may furnish free transportation to children whose homes are $1\frac{1}{2}$ miles or more away. The consolidated district boards of Kansas must furnish transportation to children 2 miles or more from school, those of Oklahoma to children $1\frac{1}{2}$ miles or more from school. Pennsylvania provides that "no pupils of abandoned schools shall be required to walk more than $1\frac{1}{2}$ miles to the new school building."

The details of transportation are of extreme importance, for the consolidated school to which children are conveyed in school wagons or in public carriers can not be satisfactory unless the transportation itself is satisfactory. This is well stated by the Indiana State superintendent of public instruction in a chapter on consolidation in his annual report for 1912.

The great objection which must be met in consolidating our rural schools is *transportation*. Many parents object, and with good cause, to the fact that their children are transported too great a distance and that they are compelled to leave home too early in the morning and are returned too late in the evening. This demonstrates that the unit of consolidation is too large. A readjustment of the consolidated area should be made, and the pupils affected should be transported a reasonable distance. In rural communities where good roads can not be maintained throughout the year the people must be content with the district school. Where the unit of consolidation is not too large transportation of pupils has made attendance larger, more regular, and eliminated tardiness. Transportation has been a great aid to the health of the children. They are not compelled to walk through the rain and in the mud, wearing wet shoes all day. In the majority of places where we have consolidation the school officials have been very careful to get responsible men as drivers of the school wagons. Consequently, the pupils are under the care of some responsible person all day, and the girls are protected on the way to and from school and the boys influenced from the temptation to quarrels and other misconduct.

The success of the consolidated school depends in very large measure upon transportation. If the transportation is safe, comfortable, rapid, and in charge of men of high character, no troubles result from it. When men of low ideals are in charge of transportation or when transportation is slow, or when the distance is too great, then certain evils are at once seen, and just complaint is made against the consolidated schools. These evils, however, are all remediable. If the people demand drivers of high character they can be secured. If the officials insist upon rapidity of transportation that too can be done. None of these evils in any way affect the real work of consolidation.

(A) THE DETAILS OF ARRANGEMENTS FOR TRANSPORTATION.

Transportation routes.—Usually the school wagon follows a definite route and children meet it on the route. The wagons are required to run on schedule and leave fixed points at set times. In a few cases wagons go to the homes of the children. Ohio requires the wagon routes to be arranged so that no child will have to walk more than one-half mile to take the wagon; South Dakota, so that no child will have to walk more than five-eighths of a mile. Iowa prohibits the wagons from leaving the public highways to receive or discharge occupants, and provides that children living "unreasonable" distances from schools or wagon routes may be transported by parents or guardians, who receive compensation for so doing.

While the wagon is the usual form of conveyance furnished at most schools, many children are transported in all parts of the country by steam railroads or electric roads. In Massachusetts and California, and undoubtedly in other States, automobile busses are coming into use. In Virginia, on one route, a gasoline launch is used.

Payment to parents in lieu of transportation.—The plan of allowing parents or guardians a certain amount per day for providing conveyance for their own children is in operation to a certain extent in many States. It is probably the only plan feasible in sparsely settled districts, and where roads are very poor. In such cases children journey to school in buggies, on horseback, or on bicycles. Often the school furnishes a shed for the horses. The amount allowed parents in South Dakota, Wisconsin, and a few other States are given on page 34 et seq.

The plan has several advantages and several disadvantages. Its principal advantage is that children ride from their own homes to the school by the most direct route and, as a rule, in less time than would be taken by a school wagon. One of the principal disadvantages is the expense. It does not require a larger expenditure of school funds, but the total expended by the school patrons is much greater. A large amount must be invested in horses and vehicles, and stabling and feed for the horses provided. If the children themselves drive, the horse is not available for other work on school days. Another disadvantage is that it does not assure the regularity of attendance and the freedom from tardiness resulting from the use of transportation wagons, or of public electric or steam railroads.

The driver.—Among those who have had experience with transportation in school wagons and in public carriers, the sentiment seems to be much in favor of the wagon when properly managed. The trip in the steam or electric car is made more quickly and in greater comfort, but the conduct of the children on public carriers

is not always as satisfactory as in school wagons where competent drivers are employed. The children recognize the right of the school directors to dictate their conduct while they are riding on wagons owned or leased by the school and driven by men or women who have the same authority over them as is held by their teachers. When riding in public carriers, children, as a rule, feel that they are outside the authority of the school directors.

Satisfactory transportation is obtained only when competent drivers are employed. Great care must be taken to select drivers who are trustworthy, temperate, careful, and whose words will be respected and obeyed. In some instances, older schoolboys living near the end of the route drive the wagons, keeping the teams in the vicinity of the school during the day. The plan is seldom satisfactory. In many cases wagons are driven by women, particularly during the busy seasons on the farm. In bad weather their places are taken by their husbands. The arrangement is usually satisfactory. The use of a farm teamster or "hired man" is not to be recommended. Whenever a parent of one or more of the children transported is employed the service is usually satisfactory. E. M. Phillips, State rural school commissioner of Minnesota, says:

The cost in consolidated schools, as shown in the reports for the year 1911-12, is surprisingly small, averaging only \$40 per month per driver. It is entirely probable that next year's reports will show a higher average salary for drivers. It may reach \$50 per month. The practice of employing schoolboys to drive is a dangerous one. A few near accidents as the result of this practice will teach boards to do away with it entirely. It pays to employ responsible drivers. It pays to dismiss promptly any driver found to be unreliable in any particular.

The wagon.—Another essential for satisfactory transportation is comfortable wagons. They must be well built, strong, safe, and warm. They must be covered and equipped with side curtains to keep out wind and storm. Glass sides are much better than curtains, as the children are not then sitting in semidarkness, and in addition they can see the country as they pass along. It results in better conduct. The best wagons are built so that the drivers sit inside with the children. They are then in the position to require proper conduct and conversation on the part of the boys and girls under their charge. In cold weather the floor is covered with rugs or with straw, and lap robes are provided. Often wagons are heated by coal or oil stoves placed sometimes inside and sometimes outside under the wagons. Footstones or planks of hardwood are sometimes used, being heated by parents at their homes in the morning and again on the school stove for the return trip. Artificial heat, however, is unnecessary except in extreme cold or on long routes.

On account of the importance of providing good wagons, it is becoming almost a general practice for school authorities in many

States to purchase wagons, hiring only the drivers and teams. In Minnesota the State department of education, in awarding State aid to consolidated schools, makes as a condition the use of wagons built according to specifications furnished by the department. These specifications call for a closed wagon with curtain sides, and glass in front and rear, the driver riding inside with the children. They designate the materials that may be used, also the size and weight of the wagon. Doors must be provided at both ends, and the front wheels must "cut under."

As evidence of the importance of proper wagons and drivers the following from the Carnegie Foundation Report on Education in Vermont is given :

In places where transportation has not been satisfactory the difficulty is often due either to the driver or to the conveyance. Parents charged that a rough boy driver had taught their boys to smoke, and tolerated and even encouraged disorder. Older drivers were sometimes intoxicated. Satisfaction almost always follows when a driver is either a father or a mother of some of the children. A second source of difficulty is the type of wagon or sleigh used. Wagons may be so crowded that the children are uncomfortable. * * * Sometimes other loads also are carried, and the children are made to walk up hills and over bad roads. Sometimes sufficient blankets are not supplied. The greatest satisfaction has been experienced with the "school barges" purchased by some of the towns. For fall and spring these are spring wagons with top and sides curtained for protection from rain and sun. The seats extend along the sides and are cushioned. For winter use there are sleighs with closed tops. In none of those observed was there provision for heating, but the drivers had often procured soapstone or pieces of hardwood, which they heated over the school stove and placed at the feet of the pupils on their way home. These same objects were heated in the homes of the pupils in the morning and used on the way to school.

The following also in reference to Vermont, but not from the report just quoted, is further evidence :

It is gratifying to report that several towns during the past biennium have purchased barges specially constructed for the conveyance of school children. In consequence the opposition to consolidation in those towns has been greatly reduced, as parents in general are not so much exercised over the question of transportation as they are over the kind provided. The experience of those towns which have provided proper and comfortable conveyance ought to be suggestive to the towns which have not so provided.

Transportation and the roads.—Transportation is, of course, much easier in a district with good roads than in one with bad roads, and there is much road in the country so bad that transportation of school children is impossible during certain seasons of the year. However, if the roads are good enough for the children to pass over on foot they are passable for wagons, and the wagons would bring them to the school with dry feet and clothes. In muddy and wet weather many children who walk to school over bad roads are required to sit with wet feet during the day.

The large number of wagons used in all parts of the country, and over all sorts of roads, is the best evidence that the consolidated school with public transportation may be established in a section with poor roads. Mr. J. B. Eggleston, formerly State superintendent of Virginia, speaking of the success of transportation in that State, says:

During the fifth year (1912) of this policy we have over 200 wagons running in all sections of the State and under almost every possible condition. We have routes as long as 8 miles and as short as $2\frac{1}{2}$ miles. We have wagons on good roads and bad roads, on level roads and mountain roads, on rocky roads and sand roads, on macadam roads and red-clay roads. We have transportation wagons of the latest and most modern type, and we have ordinary farm-wagons fitted up for the new and precious freight. We have one-horse and two-horse wagons, and in one instance we have a four-horse transportation wagon, or "kid cart," as it is called, which hauls between 45 and 50 children to school every day.

The Minnesota commissioner of rural schools says:

For a considerable period of years, too, children have been successfully transported in this State, in widely separated portions, under road and weather conditions about as favorable and about as unfavorable as the State affords. Personal investigation of the situation has shown that transportation in Minnesota is entirely practicable and generally satisfactory.

Nothing stimulates good-road building like the necessity for road travel. Consolidation has fairly intoxicated communities with a zeal for road building. Some districts still have very poor transportation routes; but many miles of road previously impassable in wet seasons have already been put in good condition, and the good work will be taken up again with the next open season. In a word, poor roads can be made into good roads and this transformation will be made with promptitude where transportation of school children is in vogue.

An interesting statement made in a bulletin on consolidation, published recently by the University of Illinois, follows:

It is a singular fact and one that escaped notice until very recently that transportation has been long practiced in all parts of the country; and when men are showing, as they suppose, conclusively that transportation of children is impossible on account of "bad roads" and "stormy weather" they will find, if they look about, that it has been going on silently for years all about them.

A good proportion of the young men and women in the village and small city high schools everywhere come from the surrounding country, and a large share of them drive or ride to and from school every day. In one instance a family of four young men, all graduated from the city high school, driving 7 miles and back daily. This was over the "mud roads" of central Illinois. In this same small city the nonresident tuition has more than paid the superintendent's salary for the last 30 years. Supt. Kern reports that the farmers of Winnebago County alone have paid over \$30,000 tuition in the city schools in the last 10 years.

In one city in central Illinois as many as seven vehicles come into town over a single road every day bringing children to school. In this instance the liverymen were obliged to make additions to their stables "on account of the horses bringing children to school."



A. TRANSPORTATION WAGONS, SHELBY CO., TENN.



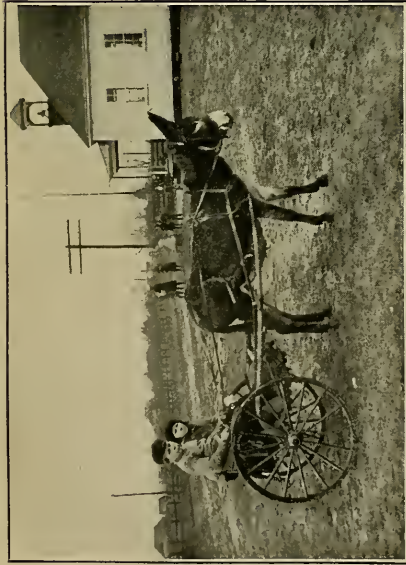
B. WINTER TRANSPORTATION AT KIRKSVILLE, MO.



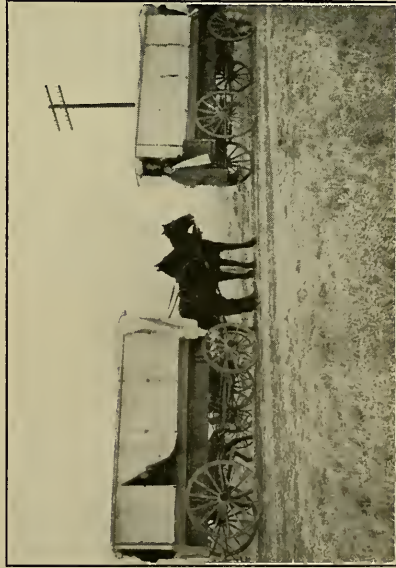
A. AUTOMOBILES USED TO TRANSPORT PUPILS, BRAWLEY SCHOOL, IMPERIAL COUNTY, CAL.



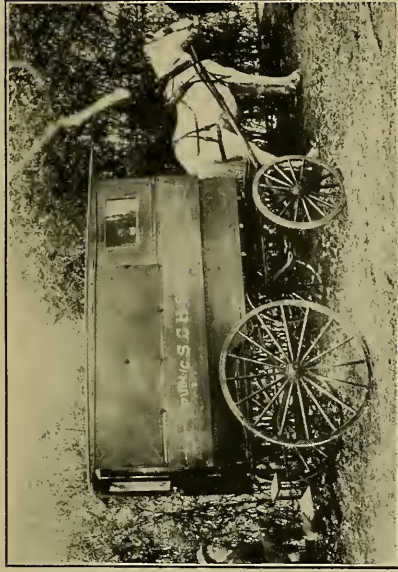
B. TRANSPORTATION WAGONS, WHITE RIVER, RANDOLPH COUNTY, IND.



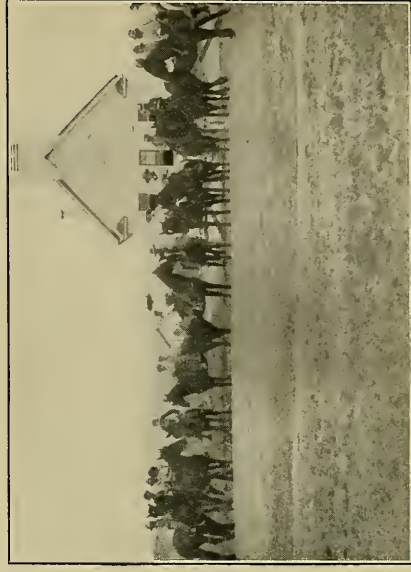
TRANSPORTATION IN AN OREGON DISTRICT.



TRANSPORTATION IN JORDAN DISTRICT, UTAH.



A NORTH CAROLINA WAGON.



ADA COUNTY, IDAHO.

VARIOUS TYPES OF TRANSPORTATION.

On the basis of facts like these it is folly to maintain that transportation is impossible. Transportation is a fact, a well-settled practice already, though it is done at private expense, which is the most costly way imaginable. It is not too much to say that the horses now engaged in carrying young men and women to the village high school in all sorts of conveyances are fully enough, if doubled up and attached to suitable vehicles, to carry all the children of the same territory to a central school. Transportation is a fact. Shall we enjoy its full fruits in a rational system of country schools?

The success of transportation.—The success of furnishing transportation seems to be universal wherever properly handled. An interesting study made in Connecticut by the secretary of the State board of education is reported in his annual report for 1913.

The expense per pupil for conveyance to elementary schools in Connecticut for 1911–12 was \$23.69 for the school year of 184 days. The total number of children conveyed was 3,481; the total expenditure, \$82,465.97. This does not include \$42,968.83 paid for the transportation of high-school pupils. The elementary children were transported by school wagons, trolley cars, steam railroads, and by private conveyances. In many cases parents are paid a certain amount per day in lieu of transportation.

The report mentioned gives for each township in the State the number of elementary school children transported, the cost for the year, and whether or not the transportation is, on the whole, satisfactory to the parents and beneficial to the schools. There are 120 townships in the State that reported children transported. Of these, 8 failed to report on the last item. The others reported as follows:

Satisfactory to parents and beneficial to schools.....	95
Unsatisfactory to parents but beneficial to schools.....	9
Unsatisfactory to parents and not beneficial to schools.....	4
Unsatisfactory to parents and no report whether beneficial or not..	4

Concerning one town in which one school was closed and the four children in attendance conveyed during the four winter months to a central school, it is stated that the sentiment in the community is "that it would be better if this school were not closed." No reason is given.

In another case where two children formerly attending a school which had been closed are conveyed by a parent, the plan is unsatisfactory because "the parent wants more money." In a third case 13 children are transported. It is reported unsatisfactory because "isolated families are expensive to transport and the parents expect too much for transporting their children." A fourth case, where 64 children are conveyed, it is reported as generally satisfactory, "except for complaints of some parents of the boisterousness of large boys in wagons." In a fifth case, where 9 children are transported by the parents, it is reported not satisfactory, but no reasons are

assigned. Three cases, where 42, 50, and 113 children, respectively, are transported by trolley and wagons, report "hardly satisfactory" in one school and "not entirely satisfactory" in two. Another case reports that it is not satisfactory in one district. Another reports that it is satisfactory, but the expense of transportation is growing and becoming a burden; another that the plan is satisfactory to parents but "not beneficial" to school; "would not close any school if there were eight pupils."

Prof. A. B. Graham, at the head of the agricultural extension service of the Ohio State University, recently made a study of the satisfaction to school patrons of transportation to Ohio consolidated schools. He states that—

80 per cent of the parents report that their children attend more regularly under transportation than they did previously.

90 per cent report their children more interested in school than before.

95 per cent think their teachers show more interest in their work.

100 per cent practically agree that the social and educational interests of the township consolidated have greatly improved.

75 per cent of those who were formerly opposed to consolidation and transportation are now in favor of it.

Miss Mabel C. Williams, superintendent of Shelby County, Tenn., writes as follows:

The transportation of pupils in public-school wagons has proved to be a great success in Shelby County. The system was instituted five years ago. We now have 15 wagons running, with petitions for many more as soon as we can build the consolidated schools. It would be impossible to persuade the pupils who ride in the wagons to leave the consolidated schools and go back to the one-teacher or two-teacher schools from whence they came. The parents and teachers appreciate the greater advantages which the large school offers. We find that the attendance is better on the wagon routes, as the children do not have to consider the weather. Only one child has ever been hurt on the wagons, and that was not serious. We have carried as many as 50 in one wagon. I do not remember that we have ever had a complaint of drunkenness, profanity, tardiness, or carelessness on the part of the wagon drivers. In fact, most of the trouble which is anticipated from the adoption of the public-school wagon never happens.

(B) COST OF PUBLIC TRANSPORTATION.

The cost of transportation varies in the different States. At the Montague consolidated school the total number of children transported in 1912-13 was 84, at a total expenditure of \$1,559.82, or approximately 10 cents per pupil per day. Each driver received on an average \$1.70 per day or \$312 per year, and carried an average of 17 children. The shortest route is 2 miles, the longest 4.5 miles. The drivers furnish their own wagons and teams. This is about the average amount paid in Massachusetts.

In Indiana in 1912 children were transported to 589 consolidated schools, in 1,446 school wagons and 532 other vehicles, including

steam and electric cars. The cost of the regular wagons was \$2.24 per day, the average route being 4.5 miles in length. Tippecanoe County, Ind., transported 1,000 children to 67 schools at an average cost of 15.7 cents per pupil per day, or \$2.34 per wagon per day. In the 13 townships of the county the cost ranges from 9.8 cents to 20.7 cents per day for each child.

Louisiana in 1910-11, the last year that figures are available at this time, transported 5,151 children in 249 wagons, at \$38 per wagon per month, or \$2.58 per child per month, or 13 cents per child per school day.

In Vermont there was paid in 1911-12 the sum of \$128,962 for public transportation and for board of pupils in lieu of transportation. The average number of children transported was 4,490, making the annual cost per child per year \$28.72, or approximately 18 cents per day. The State appropriates \$20,000 annually, which is apportioned among towns expending school money for transportation of elementary school pupils.

In Washington State the total number of pupils transported in 1910 at public expense was 1,855. There were 96 wagons used, the average cost being \$2.61 per wagon per day and \$23.75 per pupil per year, or approximately 15 cents per day. The total expenditure for public transportation in the State was \$44,523.

COST DATA FOR TYPICAL STATES.

Tippecanoe County, Ind., 1912.

Consolidation began.....	1890
Transportation at public expense began.....	1900
Number of district schools.....	45
Number of consolidated schools.....	20
Number of wagons used.....	67
Number of pupils transported.....	1,000
Cost per wagon per day.....	\$2.34
Cost per child per day.....cents..	15.7

The cost per child per day varies from 9.8 to 20.7 cents.

Minnesota, data for 1911-12.

Children transported at public expense to consolidated schools.....	911
Total cost of transportation.....	\$20,870
Cost per child per year.....	\$21.70
Cost per child per day.....cents..	14.5

Iowa, data for school year 1911-12.

Children transported at public expense to consolidated schools.....	1,643
Number of school wagons.....	93
Total cost of transportation.....	\$34,607
Cost of transportation per child per year.....	\$20.70
Cost of transportation per wagon per year.....	\$372

Louisiana.

Number of consolidated schools.....	210
Number to which children are transported at public expense.....	141
Number of wagonettes.....	249
Number of children transported.....	5, 151
Average cost per wagon per month.....	\$37. 97
Average number of children per wagon.....	16. 27
Average cost per child per month.....	\$2. 58
Average cost of wagonettes.....	\$146. 00

From Burham's study of consolidated schools of four townships in northeastern Ohio (1911).

Total cost of transportation.....	\$12, 034
Number of children conveyed.....	802
Cost per child per year.....	\$15
Cost per child per day.....	cents.. 9

A consolidated school in Larimer County, Colo.

Routes.	Miles for first child to ride.	Monthly salary of driver.	Number of children in wagon.
1.....	4	\$49	24
2.....	$2\frac{1}{2}$	40	23
3.....	5	50	25
4.....	$4\frac{1}{2}$	40	24
5.....	$2\frac{3}{4}$	37	22
6.....	5	55	25
7.....	$3\frac{1}{2}$	44	20

There were seven wagons; the average monthly salary of the driver was \$45; and the transportation cost per pupil per day was 9 cents.

Consolidation of schools and transportation of pupils in Shelby County, Tenn.

Names of consolidated schools.	Salary of driver.	Distance traveled (miles).
Germantown.....	\$60. 00	5
Levi.....	60. 00	5
Levi.....	50. 00	4
Cuba.....	50. 00	4
Rosemark.....	40. 00	4
Rosemark.....	49. 75	5
Rosemark.....	40. 00	3
Millington.....	49. 75	5
Messick.....	55. 00	3
Messick.....	55. 00	3
Ellendale.....	50. 00	3
Coleman.....	49. 50	4
Cardova.....	49. 50	4
White Haven.....	60. 00	5
Brunswick.....	44. 50	4

Transportation, Madison County, Tenn.

Names of consolidated schools.	Salary of driver.	Distance traveled (miles).
Pope.....	\$50.00	7
Pope.....	40.00	5
Pope.....	40.00	5
Malestus.....	25.00	4
Pinsen.....	25.00	5
Center Point.....	40.00	5
Spring Creek.....	40.00	5

(c) CONTRACT WITH DRIVER.

The following form contract is in use in Randolph County, Ind.:

CONTRACT FOR HAULING SCHOOL CHILDREN.

Route No. _____ Township.

Contract entered into on _____ 19__, between _____, party of the first part, and _____, trustee of _____ school township of Randolph County, Ind., party of the second part.

The party of the first part (for the sum named below to be paid by the party of the second part) agrees to perform the following work: To drive the school wagon on route No. _____ in _____ school township of Randolph County, Ind., and haul all the children of school age now residing and adjacent to said route (or who may be along said route during the life of this contract) to and from the school, according to the following schedule. The said schedule to be as follows unless changed by the trustee:

Commencing at the—	Standard sun.	Returning.	Standard sun.
.....
.....
.....
.....
.....
.....
.....
.....
Thence to the.....School arriving at.	Leaving.....School at.....	.....

Said work is to be governed by the following conditions:

1. The said.....school township is to furnish the wagon to be used and keep it in repair.

2. The said party of the first part is to furnish, keep, and feed all the horses, and furnish harness, necessary to haul the wagon on the said route, without any expense to the said.....school township, other than the pay agreed upon for the party of the first part in this contract.
(here insert condition as to stable).....

3. The party of the first part is to have control of all the school children so hauled, to and from school, to keep order and maintain discipline while in the wagon or along the route, and to treat all children in a gentlemanly and civil manner and to see that no child is imposed upon or mistreated while in his charge, and shall use every care for the safety of the children under his charge. All school hacks shall come to a full stop immediately before crossing steam or electric railways and the driver shall ascertain positively as to the approach of any danger. The party of the first part hereby agrees to prevent the use of tobacco in any form, by himself or any other person upon the school wagon while under his charge.

4. The party of the first part is to drive the wagon and take the children along the route every day that school is in session during the school year of 19.... and 19....

5. The party of the first part shall inform the parents of the school children as to the time he will arrive at the place where the children are to take the school wagon each morning, so that the children can be ready to get into the wagon with the least possible delay. He shall wait a reasonable length of time for the children in case they are not ready when the wagon arrives in the morning, but he will not be required to so wait over two minutes. Said party of the first part is to use as many horses as necessary to haul the wagon on the schedule as laid down in this contract. The party of the first part is to personally perform all the said work as laid down in this agreement, unless permission for a substitute be given by the trustee, who shall designate who such substitute shall be. This contract shall not be assigned to another person to perform without the written consent of the said township trustee, as party of the second part, and to be so written upon the back of this contract. The party of the first part is to wash and clean up the wagon at end of term and place it in the school barn, or elsewhere, as directed by the trustee without extra compensation.

6. Party of the first part hereby agrees to make all reports called for by the trustee or anyone authorized by the trustee to call for them.

7. The party of the second part hereby agrees to pay the party of the first part the sum of dollars (\$.....) per day for every day such work is performed. Pay for such work can only be drawn each month during school term or at the end of the term, or on the same plan and terms as with the school-teachers if the trustee so desires.

8. The willful violation of any of the provisions of this contract shall be cause for its forfeiture.

9. In case anything should arise not named or covered by this contract, the matter shall be adjusted by the township trustee, whose decision shall govern all parties concerned.

To all of the above we do hereby agree in every particular by signing our names on this, the.....day of.....19..

-----,
Party of the First Part.

Trustee of-----School Township, Randolph County, Ind., and
Party of the Second Part.

IV. COST OF THE CONSOLIDATED SCHOOL.

Experience in consolidated schools proves conclusively that the cost of education per child per day in such schools as a rule is much less than in one-teacher schools, provided that largely increased salaries are not paid to the teachers in the consolidated schools. The consolidated school may be, and usually is, made more expensive, due to the fact that consolidation follows an educational awakening which demands not so much centralization of buildings as the educational advantages made possible through centralization: Longer terms, better equipment, trained teachers, supervising principals, and the addition of high-school grades.

In studying data, therefore, of comparative costs of consolidated and nonconsolidated schools, consideration must be taken of work done by the consolidated schools that is not done by the others. The following data give representative figures from various States.

Cost of small schools in Tennessee and North Carolina.—That the cost of the small one-teacher school is extreme is well understood. Recent studies in Tennessee and North Carolina have been made on the cost of small schools, the schools being grouped according to the number of pupils. The average cost per child per month, based on the average daily attendance, in Tennessee in 1912 was as follows:

In 672 schools with from 1 to 15 pupils each.....	\$3.02
In 787 schools with from 16 to 20 pupils each.....	2.14
In 864 schools with from 21 to 25 pupils each.....	1.90
In 1,056 schools with from 26 to 30 pupils each.....	1.52
In the elementary schools of 13 representative cities of the State the average monthly cost per pupil based on the average daily attendance was	1.27

The average cost per child per month *for teaching only*, based on the average daily attendance, in North Carolina was as follows:

In schools of from 1 to 12 pupils, inclusive.....	\$2.56
In schools of from 13 to 15 pupils, inclusive.....	2.03
In schools of from 15 to 20 pupils, inclusive.....	1.55
In schools of from 1 to 20 pupils, inclusive.....	2.07
Cost of teaching per pupil per month, based on the average daily attendance in the elementary schools of 16 North Carolina cities.....	1.33

Comparative cost of tuition in Iowa.—The following, taken from the "Report of the State Superintendent of Iowa for 1912," includes data on the cost of consolidated schools in that State as compared with neighboring nonconsolidated schools. It must be remembered that the consolidated schools, as a rule, gave further advanced work than was given by the small schools:

The following data, tabulated from the reports of the county superintendents for the year ending June 30, 1911, show some interesting facts concerning the

comparative attendance, cost per pupil, etc., as represented by the average for all the rural schools, not consolidated, in the counties given and the consolidated schools. The average daily attendance is higher and the average cost of tuition is lower on account of the better attendance in consolidated districts than in districts maintaining small schools.

Comparative cost of consolidated and of nonconsolidated schools in Iowa.

Schools.	Average number months of school.	Number of hacks.	Attendance.		Average cost of tuition per month.
			Per cent of enumeration.	Per cent of enrollment.	
Washington County:					
Nonconsolidated schools.....	7.6	.....	47	69	\$2.99
Crawfordsville consolidated schools.....	9.0	5	81	85	1.77
Mitchell County:					
Nonconsolidated schools.....	7.8	.....	44	68	3.37
McIntyre consolidated schools.....	9.0	9	60	78	2.04
Marshall County:					
Nonconsolidated schools.....	8.2	.....	52	66	3.88
Albion consolidated schools.....	9.0	4	69	81	2.63
Dickinson County:					
Nonconsolidated schools.....	8.0	.....	53	61	3.59
Terrel consolidated schools.....	8.0	8	57	79	1.80
Emmet County:					
Nonconsolidated schools.....	8.4	.....	53	67	3.13
Armstrong consolidated schools.....	9.0	4	63	77	2.82
Dolliver consolidated schools.....	9.0	4	61	79	3.65
Clay County:					
Nonconsolidated schools.....	8.2	.....	52	61	3.66
Lake consolidated schools.....	7.0	8	71	72	1.93
Webb consolidated schools.....	9.0	4	56	69	2.73
Story County:					
Nonconsolidated schools.....	7.8	.....	54	65	3.23
Fernald consolidated schools.....	8.0	3	67	79	2.73
Winneshago County:					
Nonconsolidated schools.....	6.7	.....	41	62	3.48
Buffalo consolidated schools.....	9.0	6	66	78	1.94
Buena Vista County:					
Nonconsolidated schools.....	8.0	.....	46	72	3.73
Marathon consolidated schools.....	9.0	6	61	84	1.88
Newell consolidated schools.....	9.0	4	60	80	2.34
Truesdale consolidated schools.....	7.2	4	56	66	3.29

Cost of consolidated schools in Illinois.—The following table relative to Illinois consolidated schools was compiled by the State superintendent of public instruction in 1912. It not only gives the cost of maintaining the consolidated schools, but also shows the number adding high-school departments and the introduction of courses not practicable in district schools. It will be noted that 23 districts, with 653 children enrolled, had been consolidated into 8 districts, with 940 enrollment, while only 30 teachers were employed in the 8 districts to do the work done formerly in the 23 districts, and in addition to give the instruction in 8 high-school departments, 4 of which give full four-year courses, 2 three-year courses, and 2 two-year courses. It may be noted also that in 5 of the 8 schools agriculture, manual training, and domestic science are generally taught. The 8 schools enrolled 287 more pupils than the schools replaced, 97 of whom were tuition pupils from outside the consolidated districts.

Illinois consolidated schools—Tabulated report of county superintendents.

Items.	John Swaney School, Putnam County.	Scottland School, Edgar County.	Seward School, Winnebago County.	District 115, Woodford County.	Hindsboro School, Douglas County.	Garrett School, Douglas County.	Buncomb School, Johnson County.	Harlem School, Winnebago County.
Number of districts consolidated.	3	3	3	3	3	2	2	4
Number of sections of land in district.	16.5	10	12	14	8	6	8 3/4	18
Assessed valuation.	\$172,981	\$153,140	\$194,152	\$123,264	\$151,920	\$119,665	\$62,020	\$487,365
Tax levy, for maintenance.	\$4,200	\$3,300	\$2,400	\$5,300	\$5,500	\$5,800	\$1,600	\$3,700
Tax levy, for building.	\$2,200	\$1,000						\$800
Rate of tax per \$1,000 for maintenance.	\$2.30	\$1.47	\$1.43	\$4.30	\$3.65	\$4.90	\$2.35	\$0.95
Total tax before union.	\$2,000	\$2,991	\$900	\$1,275	\$1,700	\$3,275		\$1,600
Cost of new building.	\$14,000	\$5,000	\$6,000	\$10,000	\$14,000	\$10,500	\$4,500	\$17,700
Number of teachers.	4	3	4	3	5	4	3	4
Number of pupils.	93	63	125	104	186	103	166	100
Number of pupils before union.	48	52	79	85	100	75	152	62
Number of tuition pupils.	27	8	22		20	6	10	4
Number of years in high school.	4	2	3	4	4	3	2	4
Is agriculture taught.	Yes.	Yes.	No.	Yes.	No.	Yes.	No.	Yes.
Is domestic science taught.	Yes.	No.	No.	Yes.	No.	No.	No.	Yes.
Is manual training taught.	Yes.	Yes.	No.	Yes.	No.	No.	No.	Yes.
Is the school better than before.	Yes.	Yes.	Yes.	Yes.	Yes.	Yes.	Yes.	Yes.
Are pupils transported.	Yes.	No.	No.	Yes.	No.	No.	No.	Yes.
Are pupils satisfied.	Yes.	Yes.	Yes.	Yes.	Yes.	Yes.	Yes.	Yes.

Cost of consolidated schools in Indiana.—The most complete study of the relative cost of consolidated and nonconsolidated schools is that of the State department of public instruction of Indiana, the results of which are published in the report of the State superintendent for 1912. This gives data by counties, comparing all consolidated schools in each county with the nonconsolidated schools. The expenditures for maintenance of the two groups are given in the following table, which has been compiled from those given in the State report. The per capita cost is based on average daily attendance. The data for consolidated schools include expenditures for high-school departments, since the majority of such schools maintain grades above the elementary schools, and data are not available for the elementary and secondary departments separately.

Cost of consolidated and nonconsolidated schools in Indiana.

	Consolidated (high-school departments included).	Nonconsolidated (no high schools).
Number of schools.	589	6,962
Average daily attendance.	31,314	85,583
Total cost:		
Fuel.	\$69,348	\$244,254
Repairs.	42,945	155,465
Janitors.	67,191	82,705
Teachers.	881,624	2,624,833
Transportation.	1,061,108	3,107,257
Total.	477,110	
	1,538,218	3,107,257

Cost of consolidated and nonconsolidated schools in Indiana—Continued.

	Consolidated (high-school departments included).	Nonconsolidated (no high schools).
Per capita cost based on average daily attendance:		
Fuel.....	\$2.21	\$2.85
Repairs.....	1.37	1.82
Janitors.....	2.15	.97
Teachers.....	28.16	30.67
Transportation.....	33.89	36.31
Total.....	49.12	36.31

The total cost in the consolidated schools, not including transportation, was \$33.89 per child; in the district schools, \$36.31. Including transportation the cost per child in the consolidated schools was \$49.12.

A study of the above figures shows the cost of schooling per child, when the expense of transportation is not included, to be \$2.42 greater in the district schools than in the consolidated schools, showing that the district schools are not as economical, as far as the cost of education itself is concerned, as the consolidated schools. When the transportation is included, however, the consolidated schools cost \$12.81 more than the district schools. This looks very high; however, we must keep in mind that the educational opportunities given by the consolidated schools and by the district schools do not correspond in any respect. The consolidated schools were maintained approximately *20 days longer* during the year than the district schools; they employed *better teachers at higher salaries*, and in each building a *principal is employed* who devotes part of his time to supervising the work of the other teachers in the building. In many cases the principals are men, where under the old plan few men were employed. Furthermore, practically all of these consolidated schools *maintain high-school departments*, whereas before the consolidated schools were established there were few high schools. The per capita cost in high schools is always much greater than in elementary schools.

V. EDUCATIONAL ADVANTAGES OF CONSOLIDATION.

Consolidation is considered usually for the purposes either of securing better educational facilities or of decreasing the cost of maintaining schools. The second of these has been discussed in the preceding section. Some of the educational advantages of the consolidated school will be presented in the following sections. Much space, however, will not be taken for the subject, since it is generally

recognized that the consolidated school does offer many educational opportunities that the one-teacher school can not offer. Progress in consolidation is slow, not because these advantages are not understood, but because the difficulties connected with transportation seem unsurmountable to those without experience, and also because there is a strong sentiment for the old one-teacher schoolhouse in sight of every home. There is also a fear on the part of the property holders that property values will decrease with the removal of the local school.

The question of transportation has already been considered. Sentiment for the "old school" is praiseworthy, but it ought not to interfere with the establishment of a better school if a better school can be obtained. A school should be located within sight of every home, provided there are enough children to maintain it. President John Adams said, in 1785, "There should not be a district of 1 mile square without a school in it." There might be a general agreement if President Adams referred only to areas included within city limits.

A depreciation in land values with the removal of the local schools to a central school has never occurred as far as information has been obtained. Reports from all sections of the country are to the contrary; where good central schools have been established land values have risen, not only adjacent to the new school but through all the territory served by the school.

M. B. Hillegas, in speaking of consolidation and land values in Vermont wherever consolidation has been effected, says, in the Carnegie report on education in Vermont:

It has often been feared that the closing of a rural school would tend to lower the value of the adjacent property, but in no place where consolidation was in successful operation was this argument considered valid.

Mr. R. F. Gaither, principal of the Mays Lick (Ky.) consolidated school, in a recent article concerning the school, says:

Three and a half years ago Mr. James Kirk bought a 173-acre farm near the school known as the C. W. Williams farm at \$107 per acre. A year and a half ago Mr. Kirk sold to Mr. Eli Williams 10 acres of this land at \$125 an acre; to Mr. T. B. Robertson 30 acres, at \$110; and to Mr. James Slattery 50 acres, at \$110. Mr. Kirk has been offered \$155 per acre for the remaining 83 acres and is holding the price at \$160 per acre. The man who gave us the above facts said that he knew that the increase in value was due to the Mays Lick consolidated school. This is only one case out of many that we could cite to show that consolidation has increased property values in this district.

Supt. Eaton, in his report on the Concord consolidated school, mentioned in the first pages of this bulletin, said:

The apprehension of the owners of real estate that a depreciation of values would result if the local schools were closed have proved to be groundless.

(A) RURAL SUPERVISION.

One of the great educational advantages of the consolidated school comes through the possibilities of increased supervision without additional expenses. The city schools of the United States are efficiently supervised on the whole. Practically all cities of 4,000 population or over employ school superintendents, and many of those under 4,000 as well. The 18 largest cities of the country in 1910 were employing one supervising officer giving half or more than half of his time to supervision to every 19 teachers. Outside of New England and New York the rural supervising officer is the county superintendent, and in only a comparatively few counties are assistant superintendents or supervisors employed. Under average conditions a county superintendent can not visit his schools more than once in a year, and then the visits must be short. In many counties it is a physical impossibility on account of the size of the counties, the poor roads, the number of schools, and the length of the term, for the superintendent to visit all schools each year. Thirteen States have found it necessary to enact legislation requiring the county superintendent to visit his schools at least once each school year.

A recent study made in Tennessee from data concerning every county superintendent shows:

- (1) That the average county superintendent spends 40 days annually visiting schools, or about two-fifths of the annual session;
- (2) That he visits, on the average, 2.4 schools per day;
- (3) That he spends, on the average, 2 hours and 10 minutes at each school; and
- (4) That he gives, on the average, 1 hour and 50 minutes to supervising each school in his county during the session.

A study made in North Carolina shows similar conditions. From data taken from the reports of 14 county superintendents it appears:

- That the average number of separate schools per county superintendent in these counties is 106;
- That the average number of days given to visiting schools during the entire year of school (1909-10) by each superintendent was approximately 53;
- That the average number of different schools visited per day by each superintendent was 2.2;
- That the total average amount of supervision given by each superintendent to each school in his county during that entire school year was only 1 hour and 54 minutes.

These counties may be considered as fairly representative of the entire State in the efficiency of the superintendents, in the number of separate schools, in their geographical area, in their economic conditions, and in the density and sparsity of their population.

Much of the superintendent's time is lost in traveling from one school to another. This time is saved with consolidation. Further supervision comes with the employment of a supervising principal of

the consolidated school. A school large enough to require several teachers is large enough to require the services of a competent principal not only to manage the entire school but to supervise the work of his assistants as well.

(B) CLASSIFICATION OF PUPILS.

In the ideal school children are grouped in classes, each class containing as nearly as possible children of the same degree of advancement. In the ordinary one-teacher schools there are not enough children of the same degree of advancement to form classes large enough for the inspiration coming from class work and the friendly rivalry between pupils. There is no one to "measure up against." It is in the class that the mind of the child comes in contact with those of the other children and of the teacher. There he gets the ideas of the other pupils and learns to see things not from his own narrow viewpoint, but from a viewpoint made up of the combined experiences of the entire class. The class work in the class of from 1 to 5 children is not interesting. In classes of from 8 to 20 it is interesting. Boys and girls enjoy going to school more; they "do" better and they attend more regularly, because of their greater interest. Attendance at consolidated schools, even where transportation is not furnished, is as a rule better than at the old district schools.

The following, taken from the report of the State superintendent of Indiana, written by one of the county superintendents who has had much experience with consolidated and nonconsolidated schools, is the result of his observation:

A pupil should have a great deal of competition in his class work in order to develop the best that is in him. Competition creates enthusiasm, and certainly this is lacking in a class of 1 or 2 pupils. A teacher can teach a class of from 6 to 12 pupils much easier and accomplish a great deal more than can be accomplished in a class of 1 or 2 pupils. Consolidated schools with 150 pupils have few more classes than there are in a one-room school of 25 pupils. By combining 6 such schools, the work is easily done by 4 teachers, giving three times as much better service at the same time.

(C) DIVISION OF TIME BETWEEN STUDY AND RECITATION.

The State supervisor of rural schools of Tennessee recently made an inquiry relative to the time devoted to study and to recitation in his State in country and city schools. He reports as follows:

Assuming that the teacher actually teaches six hours during the day, and allowing no loss of time in changing from one recitation to another, we find * * * that the average length of time allotted to each recitation in schools with—

From 1 to 15 pupils in daily attendance is 14 minutes.

From 15 to 20 pupils in daily attendance, 13 minutes.

From 20 to 25 pupils in daily attendance, 13 minutes.

From 25 to 30 pupils in daily attendance, 12 minutes.

We find the number of recitations per day to be, in schools having a daily attendance of—

From 1 to 15 pupils, 24.

From 15 to 20 pupils, 26.

From 20 to 25 pupils, 28.

From 25 to 30 pupils, 28.

Average number of daily recitations per teacher in the elementary schools of 13 representative cities of the State.....	8
Average length of time, in minutes, allotted to each recitation in these city schools.....	33
Average length of school term, in days, in these cities.....	180
Average number of daily recitations per teacher in country schools having from 1 to 20 pupils in daily attendance.....	26
Average length of time, in minutes, allotted to each recitation in these country schools.....	13
Average length of school term, in days, in the country schools.....	99

A study made previously in North Carolina by the State supervisor gives the following:

From data taken from the reports of 23 county superintendents that may be considered fairly representative of the State from the standpoint of efficiently organized rural schools, it will be seen that the average number of daily recitations per teacher in schools having—

From 1 to 12 pupils in daily attendance is 25.

From 12 to 15 pupils in daily attendance, 26.

From 15 to 20 pupils in daily attendance, 27.

Assuming that the teacher actually teaches six hours during the day, and allowing for no loss of time in changing from one recitation to the other, the average length of time allotted to each recitation in schools of—

From 1 to 12 pupils in daily attendance is less than 15 minutes.

From 12 to 15 pupils in daily attendance is less than 14 minutes.

From 15 to 20 pupils in daily attendance is less than 13 minutes.

Average number of daily recitations per teacher in the elementary schools of 16 representative cities of the State.....	8
Average length of time, in minutes, allotted to each recitation in these cities.....	28
Average length of school term, in days, in these cities.....	173
Average number of daily recitations per teacher in country schools having from 1 to 20 pupils in daily attendance.....	26
Average length of time, in minutes, allotted to each recitation in these country schools.....	13
Average length of school terms, in days, in these country schools.....	80.8

The typical one-teacher rural school of the United States has 28 to 32 pupils representing eight different years of advancement; from 26 to 32 recitations are conducted each day, the recitation periods averaging 10 to 14 minutes in length. Each pupil studies, as a rule, four subjects, reciting four times a day. He spends about one-eighth of his school day, or approximately 45 minutes, in recitation, and seven-eighths, or 4 hours and 45 minutes, in study (or in idleness or mischief). The teacher gives most of her time to *hearing* recitations. She has little time for *teaching*.

In the typical city school the pupil spends approximately one-half of his time in study and one-half in recitation. The recitation periods are from 20 to 40 minutes in length, depending upon the ages of the pupils. The teacher has time, therefore, to draw out from each pupil for the benefit of the class what each has got from his study. Pupils interpret what they study in terms of the experiences in their own lives. The recitation should bring to each the benefit of the experiences of the others. This can not be done in a short period.

The excessive time allotted to study in the rural school, in proportion to the time given to recitation, is one of the objectionable features of the school. Few rural schools have sufficient, proper, and profitable reading material to give to the pupils during this long period. Few pupils can spend profitably the time in study because in the short recitation period the teacher has no time to direct extensive study. Some pupils, those with a large amount of the right kind of native ability, do well under the arrangement; the majority do not. Those who succeed do so in spite of the arrangement rather than on account of it.

Consolidation of schools makes fewer classes to each teacher, and consequently makes longer recitation periods possible. If four one-teacher schools with eight grades in each are brought together into one school and four teachers retained, each would have but two grades instead of eight, and the pupils would devote one-half of their time to recitation and one-half to study, instead of one-eighth to recitation and seven-eighths to study as in the old schools.

(D) VITALIZING THE SCHOOL WORK.

The ordinary teacher in the one-room country school can teach little but reading, spelling, writing, arithmetic, geography, and a little history, on account of the difficult conditions under which she is working. It is, however, very desirable that music, drawing, sanitation, manual training, household arts, and agriculture be taught, both for their general culture and their utilitarian values, and also for their value as vitalizing agents in the school curriculum. For instance, agriculture properly taught is probably as educative as any other school subject. It is also a vocational subject and has a practical value in making better farmers. It is likewise a "living" subject to most boys and girls; it is a part of their lives, and on and about it as a foundation their academic subjects may be based. The same may be said relative to the household sciences and arts. The one-teacher school can give little agricultural work or little domestic science; all the subjects mentioned above, however, may be taught in a school of three or more teachers.

Further discussion concerning the teaching of these subjects is given later in this bulletin, particularly under the articles on the Harlem and the Mays Lick consolidated schools.

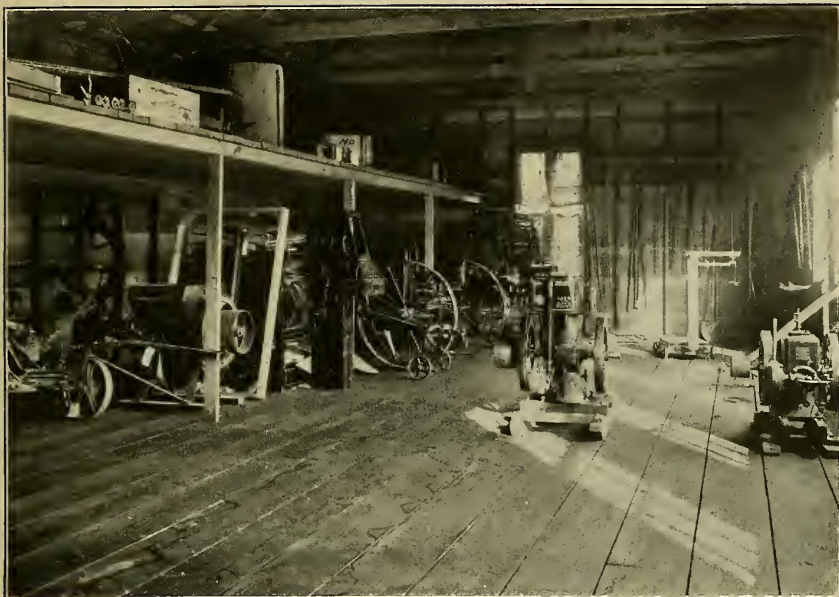
(E) HIGH-SCHOOL COURSES.

In almost every case consolidated schools are giving courses two to four years longer than the schools replaced. High schools near enough home for the children to live at home can be had for country children in no other way. In rural sections served by one-teacher schools pupils must be sent away from home for their high-school education, if they are to receive any, usually to the nearest town or city, where the education they receive draws them away from country life and their homes and people, and the cost is usually prohibitory except to the well to do. In a great many rural school districts parents of high-school pupils are paying in car fare, board, and tuition far more than enough to support a good high school at home. When the benefits of a high-school course are appreciated, and when it is understood that often great injury is done to many boys and girls by sending them away to city schools during the years when they need most the influence of their fathers and mothers and their homes, then much greater efforts will be made to provide high schools at home.

Consolidated schools of any size are seldom found without high-school departments. Iowa reports 47 consolidated schools, in all of which except four high-school departments are organized. Kansas reports 75 consolidated schools; "many of these schools have established high-school courses."

In the report of the Indiana State superintendent of public instruction for 1912 is the following statement relative to high-school departments in consolidated schools:

Possibly one of the greatest results accomplished by the consolidation of the rural schools is the establishment of the township high schools. Students who could not have entered a high school had they been compelled to leave home, attend these schools, and, in most cases, graduate from them. Consolidation has made it possible for the child of the rural district to be under the direct control of the home throughout its elementary and high-school training. Many children in our consolidated schools who do not care to even enter a high school while they are working in the grades, and some who have no home encouragement for entering high school, become interested in the high-school work by observing the enthusiasm manifested by their classmates in their hope of entering and completing the course as prescribed for these high schools. The consequences are that many children of the above-named class graduate from a good commissioned high school when they would otherwise have failed to complete the elementary schools had it not been for the consolidated school. The great increase of students attending the high schools in Indiana in the last two years is due in great part to the work of consolidated schools.



A. INTERIOR FARM MECHANICS BUILDING, SNOHOMISH CONSOLIDATED SCHOOL, WASH.



B. SCHOOL GARDEN, POULTRY HOUSE, AND FARM MECHANICS BUILDING, SNOHOMISH CONSOLIDATED SCHOOL, WASH.



A. AGRICULTURAL BUILDINGS AND FLOWER BED, SNOHOMISH CONSOLIDATED SCHOOL, WASH.



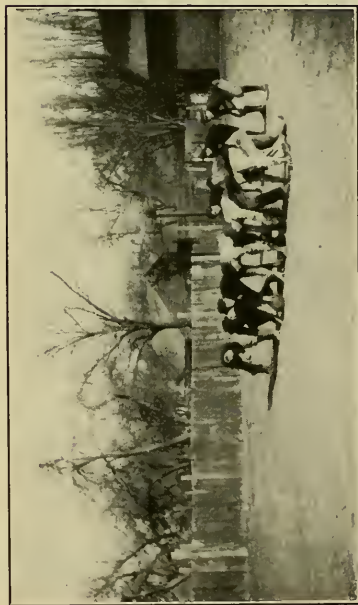
B. CLASS IN COOKING, SNOHOMISH CONSOLIDATED SCHOOL, WASH.



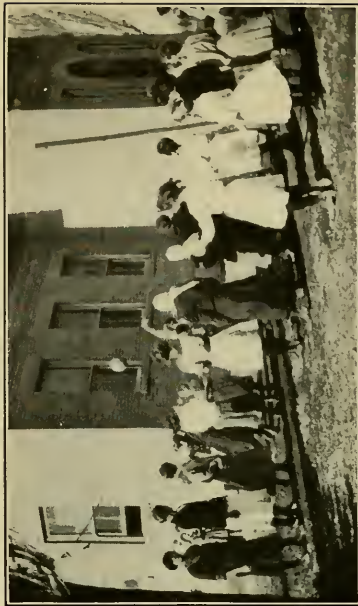
A. PLOWING CONTEST. HARLEM CONSOLIDATED SCHOOL, ROCKFORD, ILL.



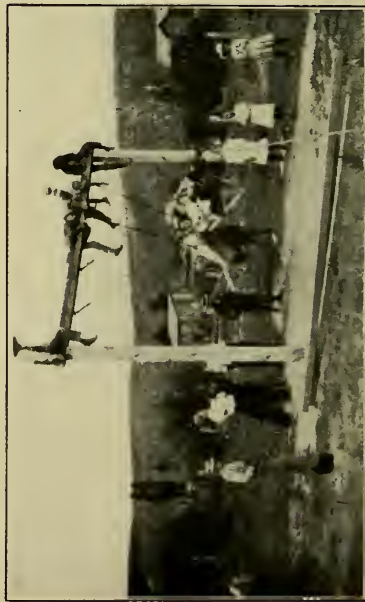
B. TESTING MILK FROM NEIGHBORING FARM. AGRICULTURAL LABORATORY, HARLEM CONSOLIDATED SCHOOL, ROCKFORD, ILL.



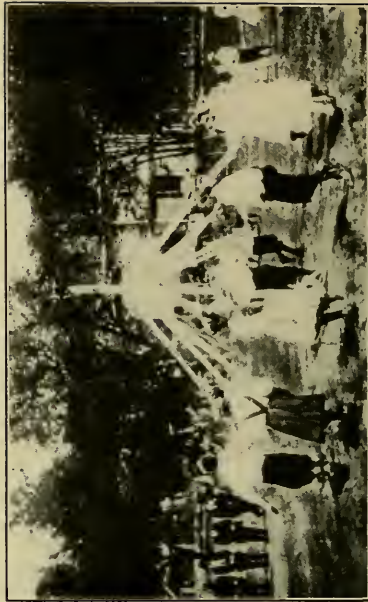
SEVENTH GRADE FOOTBALL IN A UTAH CONSOLIDATED SCHOOL.



VOLLEY BALL IN SALT LAKE COUNTY, UTAH.



ON THE GROUNDS OF AN IDAHO CONSOLIDATED SCHOOL.



MAYPOLE FESTIVAL, BRIGGSVILLE, MASS.

SOCIALIZING ACTIVITIES MADE POSSIBLE BY CONSOLIDATION.

Mr. L. L. Driver, county superintendent of Randolph County, Ind., writes of the establishment of high-school departments in the consolidated schools of his county as follows:

In Randolph County there are 13 consolidated schools. The first one was established in 1905. These 13 schools contain 84 rooms, not including recitation rooms, laboratories, workrooms, and playrooms. The buildings, not including grounds and equipment, cost nearly \$300,000. The 13 schools have an average of 3 acres of ground each. Before consolidation, 83 teachers were employed in elementary work and 8 in high-school work. After consolidation, 50 teachers were employed in elementary work and 25 in high-school work. Six of the old district schools had high-school work, only two of them employing more than one teacher; 11 of the consolidated schools maintain high-school teachers, none of which have fewer than three teachers. All of the consolidated schools but two maintain an eight-month session; the average term of the district schools was less than seven months. All of the consolidated schools with high-school departments give a four-year high-school course. Under the old plan 48 per cent of the children graduating from the eighth grade entered high school; under the new plan there are 91 per cent.

The schools have brought about a higher appreciation of school work in advance of the eighth grade. Families are now represented in the high schools of the townships which were never represented before. Children no longer are discussing the question of stopping at the eighth grade, because they have in their own midst an institution of higher learning. We know of no more convincing proof of the above influences than a reference to the statistical report of this county. In 1908-9, the year before these schools were started outside the towns, this county had 371 eighth-grade pupils enrolled, 191 high-school pupils. In 1911-12, by a strange coincidence, the report shows the same number of eighth-grade pupils, but the enrollment in the high school has increased from 191 to 417. Seventy-one per cent of the pupils of the townships of the county are in consolidated schools.

(F) SOCIALIZING INFLUENCES OF THE CONSOLIDATED SCHOOL.

The added value of the consolidated school over the small one-teacher rural school as a socializing agency can hardly be estimated. The larger school brings its pupils into contact with several teachers and a larger group of children than in the small school, who come from many different kinds of homes and from a wider territory than those in the single district. This contact with many children widens their visions and gives to them a breadth of view impossible in the small district. There is a disappearance of much of the shyness and bashfulness often particularly noticeable in the country child, a trait which often proves a handicap to him in affairs of his later life. He not only has contact with a large group of children, but he associates with them, measures himself against them, and forms a more correct estimate of himself and his ability than is possible otherwise. He learns to take his part in their activities, to cooperate, a lesson sadly needed in American country life.

In the consolidated schools may be formed singing classes, literary societies, debating clubs, and dramatic associations. All of these have great value in the making of the boy and girl. Athletics may also be developed for both boys and girls, with the increased school spirit and the improved school work always resulting from athletics properly conducted.

The consolidated school, in addition to the socializing influences on the pupils, may have a similar influence on the community. It is difficult for the one-teacher school to be a "social and civic" center; it is easy for the consolidated school to become such. In other direct and indirect ways the consolidated school may have a great influence on the territory it serves. Many have. Among them may be mentioned the Farragut School at Concord, Tenn. This is a consolidated school with a full high-school course, serving for high-school purposes a much larger territory than for elementary school purposes. It is located in open country, 2 miles from the nearest village, and on a 20-acre lot on which successful farming demonstrations have been carried on for 10 years since the opening of the school. Agriculture, manual training, and domestic science are included in the curriculum of the high-school department. The following are some of the ways the school is serving the community:¹

On the last Friday night before each full moon there has been held at the schoolhouse, for the past five years, meetings called "moonlight socials." These are community gatherings to which all are welcome. The program varies from meeting to meeting. There is always a liberal allowance of music and usually a talk on a subject of general interest pertaining to some phase of farm and home life. Sometimes the talks are given by outside persons, from the State Agricultural college or elsewhere. More often, however, there is a general discussion of a selected subject, led by a few members of the community selected before the meeting. If the subject to be discussed deals with technical phases of agriculture in which they are not interested, the women will meet in another room and discuss some problem of housekeeping. The discussions are made as practical as possible. After the regular program is over the evening is given to general sociability, playing games and singing familiar songs. Usually some sort of lunch is served. The domestic-science room has facilities which make the serving of a lunch very easy. The meetings are well attended and have become a very important part of the community life.

Other evening meetings are held in the schoolhouse on many special occasions. If the people of the community desire to get together for any purpose the schoolhouse is always designated as the place of meeting.

The biggest meeting of the year, however, is on Commencement Day. The program lasts all day. In the forenoon the graduating exercises take place, with essays or short talks by members of the graduating class. These essays and talks are usually upon subjects pertaining to farm and country life, and are therefore of more interest to the audience than the ordinary high-school graduation essay or oration. At this forenoon meeting the graduates receive their diplomas. At noon a basket dinner is served on the grounds under the large shade trees. The food contributed by each family is put in a common lot

¹ Taken from Bureau of Education Bulletin, 1913, No. 49.

and served as a community dinner. The domestic-science room is utilized to make the lunch more complete. This plan helps make the lunch hour a real social hour. After dinner the visitors inspect the plat demonstrations in rotation of crops, and the progress of the various crops under the different treatments is noted. The features of the demonstration are explained by the principal of the school. At 2 o'clock the people assemble in the school and there is a commencement address, usually by some prominent outside speaker. Following this is a baseball game between the high-school team and either a team from some other school or a selected team from among the farmers of the community. In the evening a drama is presented by the students of the school. This part of the program creates great interest and is always well attended.

Another service of the school is in furnishing agricultural reading for the farmers and their wives in the community. The school library contains about 200 books and a large number of Government reports. It also contains about 4,000 bulletins from various experiment stations in the United States. There is an abundance of valuable reading in these bulletins which is not ordinarily available for farmers, because they have no way of determining where the most valuable material is to be found. This school has been very successful in its attempts to overcome this difficulty. One teacher of the school examines all bulletins received. He notes particularly what in the bulletins is of value to the farmers and housekeepers in the territory served by the school. He therefore not only has information on the particular subject discussed by the bulletins, but also is able to put into the hands of the people of his community the material which will be of most value to them. All the bulletins and books of the library are constantly in circulation in the community and are available for young and old people alike. The school building is open on Wednesdays and Saturdays throughout the summer vacation for those who care to visit the library to consult the books and bulletins in the library, or to get books, reports, bulletins, or periodicals for home reading.

During the vacations the school playgrounds are used freely by people in the district. They are, in fact, community playgrounds, on which the boys gather for baseball and other games whenever their duties permit. The tennis courts and basket-ball courts are in considerable demand. The school and its property are regarded by the individuals of the community as belonging to them, and they are welcome at all times to make any use of them which does not work injury to the school. On days during the summer vacation on which the school library is open the shower baths are also open and many visitors use them.

The school grounds and demonstration plats are open to inspection at all times, and farmers driving by frequently stop to examine the crops. Many of them visit the plats at regular periods and study carefully their progress.

Another important community service comes through the outside activities of the principal of the school. He has become an expert adviser in agriculture to all the farmers of the community. He is employed throughout the year, and a horse is furnished him. When school is not in session he spends much of his time in driving about the community, visiting the farmers on their farms and getting in touch with local agricultural conditions and problems. This enables him to know well the agricultural conditions of the community, to adapt the work of the school to the needs of the community as he finds them, to bring to each farmer expert advice for his own particular needs, and to give to all information in regard to the best things done by any. It also enables him to keep in touch with the boys' corn-club work and other agricultural work, and to see that in their practical work on the farm they apply the principles learned in school.

(g) A PERMANENT TEACHING FORCE.

One of the advantages of the consolidated school is the possibility of maintaining a stable teaching force. In the school with four or more teachers there will be relatively few changes in the teaching force, never a complete change, as always takes place in the one-room school when the teacher resigns. A permanent teaching force is essential in making a school efficient and satisfactory. It is particularly desirable that a good principal be obtained for any school—particularly for the consolidated school—and retained as long as his work is satisfactory. This can be done by paying a sufficient salary, or it can be done by providing a home for the principal, given to him rent free, with land enough for a garden or a small farm by means of which his salary can be supplemented. The chief value of the teacher's home, however, is that it tends to make the teacher more definitely a part of the community by tying up his interests more closely with those of the community.

Teachers' homes in connection with the consolidated schools are becoming quite common, instances being reported from many States. They are probably more common in Washington State than in any other. In discussing teachers' homes in connection with consolidated schools in the introductory chapter of his annual report for 1913, the United States Commissioner of Education says:

When such a consolidation is made, a good schoolhouse should be built, attractive, comfortable, and sanitary, with classrooms, laboratories, and library, and an assembly hall large enough not only to seat comfortably all the pupils of the school, but also to serve as a meeting place for the people of the district. For the principal's home a house should be built on the school grounds. This house should not be expensive, but neat and attractive, a model for the community, such a house as any thrifty farmer with good taste might hope to build or have built for himself. And as a part of the equipment of the school there should be a small farm, from 4 to 5 acres if in a village or densely populated community, and from 25 to 50 acres if in the open country. The principal of the school should be required to live in the principal's home, keep it as a model home for the community and cultivate the farm as a model farm, with garden, orchard, poultry yard, dairy, and whatever else should be found on a well-conducted, well-tilled farm in that community. He should put himself into close contact with the agricultural college and agricultural experiment station of his State, the departments of agriculture of State and Nation, farm demonstration agents, and other similar agencies, and it should be made their duty to help him in every way possible. The use of the house and the products of the farm should be given the principal as a part of his salary, in addition to the salary now paid in money. After a satisfactory trial of a year or two a contract should be made with the principal for life or good behavior, or at least for a long term of years.

In this way it would be possible to get and keep in the schools men of first-class ability, competent to teach children and to become leaders in their communities. The principal of a country school should know country life. A large part of country life has to do with the cultivation and care of the farm. The

best test here as elsewhere is the ability to do. The principal of a country school in a farming community should be able to cultivate and care for a small farm better, or at least as well, as any other man in the community.

(II) SUMMARY.

That the average consolidated school as an educational institution is much superior to the average one-teacher school is the general consensus of opinion of those who have had experience with each either as administrative officers or as teachers. N. C. McDonald, State rural school inspector of North Dakota, writes as follows:

In the 57 consolidated schools that I have visited during the past two years, I have found the work to be much better than in the best rural schools I have been in at any time. Last year I conducted a series of tests in spelling and arithmetic. These were given to the fifth to eighth grades, inclusive, in 30 one-teacher rural schools, 30 graded rural schools, 30 consolidated schools, and 10 city schools. The results are as follows: The grand average in both subjects for the fifth to eighth grades for city schools was 90 per cent; graded schools, 80; consolidated schools, 80; and rural schools, 55. For the eighth grade alone the grand average for both tests for city schools was 90, for graded schools 80, for the consolidated schools 81, and for the rural school 43. The pupils in the rural schools were naturally just as bright as these in the other schools; but too many classes for the teacher, poor attendance, and poor teaching had left them far behind. Consolidation will remedy this and other conditions also. Then when we compare the number of boys completing the eighth grade, the graded and the consolidated schools are ahead of the rural school in that they graduate a larger proportion. In the schools inspected it is nearly three times as great, and for the city schools it is seven times as great. Here is the great waste in the rural school. But consolidation improves the grade and quantity of school work and increases the proportion completing the eighth grade.

The principal benefits of consolidation are summarized in the 10 points given below. These seem to be agreed upon by school authorities and patrons wherever consolidation has been given a fair trial. Many of these points are brought out in the following pages in the stories of several individual schools:

Many statements may be given concerning the advantages obtained by the consolidation of rural schools. Principal among these advantages are the following:

1. Adequate supervision of the teaching work is made possible through consolidation.
2. Better educational results are obtained through the better division of the pupils' time between recitation and study.
3. Classification becomes possible with all the advantages to the pupil of working in a class of pupils approximately his own age and in the same stage of mental advancement.
4. Vitalizing special subjects such as music, drawing, agriculture, and household arts may be taught in the consolidated school.
5. High-school grades may be easily added to the consolidated school.
6. Pupils gain much education, general culture, and breadth of view from contact with the larger number of pupils met in the consolidated schools.

7. The child's progress is not seriously delayed as in the one-teacher school by the change of teachers. The teaching force in the consolidated school is stable. The entire force seldom change at the same time. In the one-teacher school the entire teaching force always changes at the same time and seldom leaves any adequate records behind. The new teacher must classify the pupils on the pupils' own statements of where they belong.

8. Better teachers may be obtained for the consolidated school. Teachers like to work where they may have the association of other teachers, they like to live where they may meet other teachers.

9. A study of consolidated schools shows that longer terms, a larger enrollment, and a more regular attendance result from the consolidation. There is a very marked improvement in attendance where transportation is furnished.

10. The cost of the consolidated school is less than the one-teacher schools considering the advantages obtained.

VI. SOME TYPES OF CONSOLIDATED SCHOOLS INVESTIGATED AND REPORTED BY COLLABORATORS OF THE BUREAU.

(A) THE MAYS LICK CONSOLIDATED SCHOOL, MASON COUNTY, KY.

I. HISTORY OF THE CONSOLIDATION.

By McHenry Rhodes,¹ Professor of Secondary Education, State University of Kentucky.

Consolidation of schools and school districts into larger centers of educational interest is comparatively new in Kentucky. It is a subject now generally discussed, but one upon which very little has been done as a State movement. A few progressive centers, however, have made a beginning in an experimental way. The consolidated school at Mays Lick, in Mason County, is a typical center and may fairly represent what is the beginning of the movement for consolidation in this State.

Mays Lick is a small town of about 250 people, situated some 10 miles from Maysville, the county seat. In 1908 Mason County undertook to comply with the county high-school law, which required each county to establish one or more county high schools within two years from that time, by making preparations to establish two county high schools, one at Minerva and the other at Mays Lick, both rural communities. The people of Mays Lick and vicinity conceived the idea of consolidating the contiguous districts into one and making a real consolidated school, instead of a high school only. They set about accomplishing this end, and cooperating with the county board of education erected a commodious brick building at a cost of approximately \$30,000.

¹ Collaborator, U. S. Bureau of Education.

The building is modern in structure and arrangement. It has eight rooms, and seven teachers are working therein. The principal is a college graduate with experience; the high-school assistant is also a college graduate; the five grade teachers have had special preparation for their work, four of them holding State certificates. The consolidation at once emphasized the necessity for better teachers.

Facts about the cost of maintenance may be summarized as follows:

The school holds annually a session of 9 months—36 weeks. The salary of the principal is \$125 per month and that of high-school assistant \$75. The first-grade teacher receives a salary of \$55 per month, the eighth-grade teacher \$50 per month, the other three \$40 per month each. The salaries of all teachers are paid out of the general school fund.

Seven wagons were purchased at a cost of \$157 each and drivers were employed at \$40 per month. The driver furnished his own team and harness. This part of the expense is borne by the consolidated district, which taxes itself by special levy for this purpose.

As might have been expected, new movements like this could not be inaugurated without opposition. The opposition, though representing a very small minority, brought suit to prevent the collection of taxes to pay for transportation of pupils. The matter was taken through the courts, and the appellate court held that transportation of pupils was not a recognized school function and therefore illegal. The court further stated that the legislature had the right to pass a law providing for transportation of pupils, but had not done so. This final decision was rendered by the appellate court in February, 1912. The legislature was then in session. A bill was speedily prepared and passed by the general assembly providing for consolidation of schools and school districts and for transportation of pupils to and from school at public expense, also legalizing what had already been done in this direction at Mays Lick or elsewhere, thereby vindicating the principle of consolidation and preparing the way for future work in this direction.

The enrollment in school last year was 266, which was 95 per cent of the children of school age in the district. The difference in progress of students under the consolidated plan as compared with the single-district plan can not well be determined, as the time of operation has been too short for definite conclusions, but both the county superintendent and principal declare that the work under the new plan bids fair to produce very satisfactory results. The patrons are impressed with the value of the plan and its superiority over the one district. In fact, the idea is taking strong hold of the public mind in Mason County, and other communities are getting ready to consolidate districts into grade-school centers with better facilities and supervision.

This experiment was tried under very advantageous conditions. Mason County is a rich agricultural county; splendid pikes traverse the entire county, making transportation easy. Much of the success of the movement is due to Miss Jessie O. Yancy, the county superintendent of schools.

The course of study, while it comprises the essentials of culture, is also arranged with a view to ministering to rural conditions and community needs. Courses in agriculture and household arts are maintained. The boys have a corn club, and the girls a club in the domestic arts. Athletics receive special attention. A school fair is annually conducted. Last Thanksgiving the ladies of the community gave a dinner in the school building, and the pupils gave a play in the evening, charging a small admission fee. The net proceeds from the day's entertainments were \$319. This sum was expended in installing sanitary drinking fountains and providing a rest room for the girl students. During the three years the school has been in existence a total of \$819 has been realized from school entertainments and lectures. The pupils are happy, the people are delighted, and the social center spirit is abundantly in evidence. The auditorium is crowded at every meeting. These social and industrial activities that are now a regular part of the school life were practically impossible before consolidation.

The drivers have so far reported very few cases for discipline on the roads. The children realize that they are under the care of school authorities on the road as well as in the school. The regularity of attendance created by transportation has made classification in the school more regular.

The local tax voted by the consolidated district yields an annual net income of \$3,200. From this source come the funds for defraying the expenses of transportation. The rate of taxation in the county for school purposes is 20 cents on \$100 of taxable property, and the additional rate in the consolidated district for purposes of transportation is 20 cents on the \$100 of taxable property. Both taxes are collected by the sheriff as other taxes are collected and are turned over to the proper school authorities.

This consolidated school, combining both grades and high school, may fittingly be styled a typical consolidated school for Kentucky. It will serve and is now serving as a demonstration school to other parts of the State. It started under favorable conditions, has lived down what little opposition that developed to it, has set a new ideal in the people of the community, and is in fact the social and intellectual center of community life.

The following is a letter written by Mr. W. E. Pyles, trustee of the Mays Lick school to the State superintendent, and tells in a per-

sonal and interesting way some of the obstacles met and overcome in the first few years of the school's history:

MAYS LICK, *February 25, 1913.*

DEAR MR. HAMLETT: I am writing you in regard to our consolidated school at Mays Lick. I am giving you the details of how it was built. After the enactment of the Sullivan school law in 1908, I was elected trustee of the subdistrict school at Mays Lick, and chairman of educational division No. 4, and secretary of the county board. Soon after the organization of the county board we decided to establish somewhere in the county a high school. At a meeting called for this purpose, I expected the board would select Mays Lick, as I thought here was the ideal place, as it would serve more children from their homes, but each of the other members had a location in his division where a high school was desirable. We adjourned without making a selection. Before we met again I consulted the Mays Lick people, and we decided to make the board of education a proposition that our district would pay \$5,000 on the school building; that is, we would vote a local tax each year of \$1,000 for five years. Fifty substantial men signed a contract that if any year the district should fail to vote the tax, they would pay the \$1,000 as individuals. Being of the opinion that this was more help locally than any other place would give, they decided to locate the high school at Mays Lick.

We then secured an option on 10 acres of land, employed an architect to furnish plans and specifications, advertised for contractors to submit estimates, the board expecting to create a sinking fund to pay for the building, but when we selected the lowest contractor, and were ready to sign the contracts, we were advised that we had no money to build, and the law prohibited us from creating a debt we could not pay from that year's revenue. The board concluded that it was impossible to erect a building suitable for a high school, and was about to abandon the proposed high school at Mays Lick. Then the Mays Lick people proposed to the board that they would furnish the money for the building, and to do this, we organized the Mays Lick Improvement Co., incorporated, at \$100 a share; sold 50 shares, amounting to \$5,000, and borrowed \$20,000. Then the Mays Lick Improvement Co. entered into an agreement with the board of education to erect on the 10 acres already selected a building according to the plans and specifications furnished by the board; the board agreeing to pay the improvement company \$3,000 rent a year, in addition to the \$1,000 paid by the district, until the improvement company had received all the money expended, with 6 per cent interest, the property then to be deeded to the county.

The building when completed cost about \$32,000, a part of the money due from the county board for the first two years being paid directly to the contractors. We thought the building, consisting of six large rooms, two small rooms, and auditorium, seating 350, would accommodate the children in a district the boundary of which would be from 4 to 5 miles from the Mays Lick School, and containing what was originally seven districts. The county board being assured by the taxpayers who petitioned the board to consolidate these districts that they would vote a tax to transport the children, the board consented, and in the spring of 1911 formed the consolidated district. At the following August election a vote was taken as to whether or not they should levy a 20-cent tax for local school purposes, including transportation of children to and from school, the vote being 134 for the tax and 90 against. The sheriff collected the tax, amounting to \$3,535.28. A few of our wealthy taxpayers, who thought they could not afford to pay taxes for school, enjoined the sheriff from paying the money to the school board. The lower court dismissed

the injunction, but the court of appeals ruled we had a right to use the money for local purposes, as generally understood, but could not use any part of it for transportation. This decision was not reached until January, 1912. We had bought seven wagons at a cost of \$165 each, and had contracted with seven men with teams at \$40 per month for driving from September. We had not anticipated this ruling from the court. Our side of the question was in the hands of Judge Henry S. Barker and Judge Ed O'Rear, who gave considerable time and thought to the case without cost to the school. However, the legislature was in session, and Miss Jessie Yancey and myself left at once for Frankfort, when we explained to the committee on education that we had made the contracts and had the money; that the voters had said at the polls how it was to be used, and desired a law that would permit the money to be so expended. At this session a bill was passed empowering county boards to consolidate districts, and to submit to the voters a proposition to levy a tax to transport children, and validating an election already held. So we continued to transport children to and from school. At the August election, 1912, we again voted as to levying a 20-cent tax for transportation with 105 for and 24 against. This year we had an enrollment of 296 and used nine wagons. In addition to the tax, we have raised, since our building was completed in the fall of 1910, by entertainments and rent for the auditorium \$1,355.12; also raised by private subscription \$265 to extend the term of 1910 and 1911. With this money we have lighted the entire building with acetylene gas, installed sanitary drinking fountains, piano, window shades, supplementary readers, flowers, trees, etc., and have a balance sufficient to equip laboratory and furnish rest room. At the instigation of our assistant principal, Miss Frances Jean Gordon, in the spring of 1911 we set aside one Friday as a working day on which the men with their horses and wagons were invited to help the school boys to sod that part of the yard between the building and the road, the ladies and school girls furnishing dinner. A day enjoyed by all taking part, and a large yard made beautiful. If this work had been done by contract, it would have cost \$250. Altogether this district has raised since 1910 by local taxes, etc., \$9,869.67. It might appear that this is a wealthy district, but 56 per cent of the children in the census are in rented homes.

Yours, very truly,

W. E. PYLES, *Trustee*.

II. THE WORK OF THE SCHOOL.

By R. F. Gaither, Principal.

The first year after consolidating 7 school wagons transported the children. The next year it took 9, and after school opened for 1913-14 we were compelled to put on the eleventh wagon to relieve the congestion on one wagon that at times brought in as many as 42 pupils. The increase in the number of wagons is a pretty fair index of the increase in attendance. This increased attendance would within itself seem to justify the increased expenditure. The number of teachers has been increased to seven, and some of the rooms have this fall (1913) been crowded beyond their capacity so that we are very much in need of another teacher.

Not only are more pupils brought into school, but tardiness is reduced to a minimum, and those who are enrolled attend more regularly than under the old system. Although our school was closed

last year by epidemics of meningitis and measles, still our attendance based on enrollment was 93.9 per cent. This attendance is very gratifying when we compare it with that of Mason County, 60 per cent; that of Kentucky, $57\frac{1}{2}$ per cent; and that of the United States, 72.1 per cent. The main benefits derived from consolidation with transportation can not be given in figures. These benefits may be classed under three heads as: Benefits to the school as an institution developing true citizens, benefits to the student body, and benefits to the community at large.

The one-room school, like all small institutions, is not generally susceptible of a very high degree of organization, while the consolidated school can be as thoroughly organized as a city system. Among the host of benefits to the school that we have found resulting from better organization are better discipline, better grading and classification, a longer period of time for each recitation, and a better opportunity for personal work with backward pupils. The latter is a very important part of the school's work in elevating the social status of the community. Sympathetic interest and a little personal attention will help hold the backward pupils in school and keep them from dropping out and swelling the number of semi-illiterates of the community.

The benefits accruing to the country pupil from consolidation can hardly be estimated. It gives to him a broader life, widens his vision, and affords him an opportunity to more nearly fill up his life to the full measure of its possibilities. In the consolidated school the pupil has a wider circle of acquaintances and learns to estimate his own value. He has a better opportunity to realize that he is really one of the units of an active world. He does not have to come into middle life before it dawns on him that he should be one of the active agents in shaping the trend of affairs, political and otherwise.

We believe that we have noticed some immediate and direct effects on our pupils. They are imbued with a higher sense of honor than is generally found in the small school. When we began, the "gang spirit" was strong. Some of its undesirable features were prominent. An offender was protected. Now they feel that it is the dignity of the institution and the self-respect of the student body that must be protected, and offenders have ceased to try to conceal themselves among a number of their companions, trusting that the companions will accept a part of the blame rather than expose them.

We can not estimate what part of our high percentage of attendance is due directly to the transportation feature, but we believe that, among the older pupils especially, there is another element that enters into it to a very marked extent, and that is the student's realization of the importance of each day's work. It requires an

exceptional teacher to handle the large number of classes necessary in a one-room school in such a way that the stimulus of grade distinction is not lost. Usually the different grades must be jumbled together and the recitations hurried through in such a way that the pupil comes to attach little importance to the day's work as such. Opposite conditions are easily attained in a consolidated school. Last week one of our pupils came to me with a statement like this: "I have necessarily been absent two days, and it looks to me like I am two weeks behind my class." Such a pupil knows where she stands at the end of each day and will exert herself to be regular in attendance and "make good" in her work.

Everyone knows of the inspiration that comes from numbers. We have all felt the difference between plodding along alone and being carried on by the sweeping current of the crowd. The child feels it perhaps more sensibly than the adult. The Southern negro, who is more nearly the child of nature than the white man, feels it to such an extent that he is almost gregarious. This love of the crowd is in almost all normal people. It is one of the influences that draw boys and girls to the city. Its effect is as great in school as it is elsewhere. Lack of numbers in each class is, to a large extent, responsible for the older pupils quitting the one-room school before they complete the grade work. Don't blame the pupil. You who experienced like conditions did the same thing, or would have done so had not your parents restrained you. In our school, consolidation has proven a cure for this evil. Out of 24 pupils who passed our eighth grade last spring 23 entered the high school this fall. As you read that statement, bear in mind that between the eighth and ninth grades is one of the breaks in our school system. Consolidation holds the pupils in school.

The building of character by means of wholesome athletics should be included in the catalogue of benefits of consolidation. Our boys and girls find in basket ball, baseball, tennis, track-team work, and other sports an outlet for their animal spirits, so that the larger boys are not found out behind the house teasing small pupils and raising "scraps" among them. In the friendly rivalry of their sports the larger boys have learned so well the lesson of "give and take" that when present they generally stop any troubles brewing among the younger pupils. Not a single fight has come to our attention during the three and a half years we have been here. Athletics benefits not only the pupils participating, but it is an excellent means of creating that valuable asset, school spirit. All the countryside come to see the games. They get interested and root for the home team, and then go home talking about "our boys" and "our girls" and "our team" when athletics is the only tie that binds some of them to the school.

Consolidation brings together a sufficient number of pupils to make possible the organization of an efficient literary society in every school. Almost all men and women of middle life have had the experience of being called on to make a talk, and unless they have had training their speech usually consists of little else than rising to their feet, getting red in the face, choking up, and sitting down. Besides bringing our people together in pleasant social intercourse, we expect our literary society to have a marked effect on the careers of our pupils when their school days are over.

In a one-room school the teacher has neither facilities nor time for manual training unless other duties are neglected. Neither is there time for drawing and music. These are potent factors in developing higher ideals and the æsthetic nature of the child and should be given to every country child when possible. We know that they have exerted a beneficent influence over our children but have not the opportunity to observe to what extent their cultural value has affected the homes.

We can observe in only a general way the benefits consolidation has conferred on the community at large. Of course all benefits received by the pupils directly are received by the community indirectly. Each year the Mays Lick Consolidated School is increasing its number of friends. The people believe in it and give unmistakable evidences of pride when speaking of it. The school spirit of the pupils has spilled over into the homes of the patrons and even into many homes that are childless. An entertainment given by the pupils nearly always fills our auditorium to its seating capacity of 350, and we usually have to sell standing room. Thus far we have not thought it best to organize a parent-teachers' association in this district. We attain the ends sought by such an association and at the same time keep the people interested as a whole. To illustrate our point let us consider our school bazaar and Thanksgiving dinner. About six weeks before Thanksgiving the principal issued a request for all ladies interested in getting up a bazaar and Thanksgiving dinner to meet at the schoolhouse on a certain day. The day appointed was very disagreeable, and so only two ladies were present. Were we discouraged? Not at all. We had felt the pulse of the community too often for that. We appointed another day for meeting a week later and adjourned. At the second meeting a sufficient number were present to guarantee success. A president was elected, committees were appointed to solicit donations from every person in the district, and in a few days practically every home in the district was preparing something for Thanksgiving Day, either for the dinner or for the bazaar. Of course the day was a success, just as the two previous ones had been. In the last three years we have taken in over \$1,000 in just this way. After three trials some of the people

are asking that we make the Thanksgiving dinner a permanent thing. The money thus raised has been used to pay for our drinking fountains, piano, light plant, laboratory, furniture for a rest room, window shades, shade trees, flowers, and many other small items.

(B) THE COMSTOCK (MICH.) CONSOLIDATED SCHOOL.

By Ernest Burnham,¹ Director of Rural School Department, State Normal School, Kalamazoo, Mich.

The Comstock consolidation was made in 1906 and consisted at first of four whole districts and parts of two other districts. The area was afterwards extended to 18 sections, or one-half of a township. The curriculum of the school developed rapidly to include domestic art, manual training, drawing, and music. Library, laboratory, and classroom facilities were accumulated, and excellent service was rendered by the school, which became one of the best graded schools in the county outside of the city of Kalamazoo. However, in June, 1914, three of the old districts withdrew from the consolidation and opened small schools at home. The reasons are given later in this article.

Before the dissolution of the consolidation three vans and a trolley line which crossed the district and passed near the school were used for transportation. The chief expressions of dissatisfaction were in respect to the tax rate, which had risen from 2.4 mills the first year of consolidation to approximately 12 mills (not including permanent investment, which raised the rate to 14 mills) in 1911, and to the difficulties of transportation. Extending the school site, enlarging and improving the building, and a comparatively liberal budget for current expenses account for the increase of tax rate.

The present superintendent, who has been in continuous service since the establishment of the consolidation before it was decided to return to the district plan, suggested the following considerations as the important lessons of experience:

1. Transportation is the hardest feature. This should be reduced to a minimum. Next year's plan is to start from the homes one hour later, to abbreviate the intermissions, and occupy these brief recesses for organized play and a warm luncheon.

2. Teachers should be secured who are intelligent about and interested in rural people and conditions.

3. Expansion of the equipment and curriculum should proceed rapidly at the beginning of the consolidated school, and to make this possible initial expenditures should be distributed by bonding over a considerable period of years.

4. The consolidated school should own its lighting and pumping station and should be provided with sanitary drinking fountains and all necessary hygienic furnishings at the start.

¹ Special collaborator, United States Bureau of Education.

5. Established practices will safeguard the elementary school. The high school will need to be stimulated, and the cooperation of all local organizations to this end should be sought. An energetic civic improvement league has been a great aid in Comstock.

6. The real opponents of the consolidated school are not the people at large, but the heavy taxpayers.

Table 1 following summarizes significant statistics about the Comstock Consolidated School. In the table, after "Father's occupation," "A" is agriculture, "I" is shopwork industry, and "T" is teacher. After kind and grade of present certificate, "Life" means a State life certificate to teach, "2" means county second-grade certificate, and "3" means county third-grade certificate. "Visits by superintendent" refers to the county school commissioner, a position corresponding to county superintendent in other States. The data are for 1912-13.

TABLE 1.—*Summaries of district and teachers, 1912-13.*

District.		Teachers.	
Area in sections.....sq. m..	18	Median age, in years.....	25
Tax valuations.....	\$566,340	Number of teachers.....	M, 1; F, 8
Site in square rods.....	100		A, 4
Value of school property.....	\$7,000	Father's occupation.....	I, 4
Rate of local tax.....mills..	12		T, 1
Total cost of transportation.....	\$1,375	Educational preparation (median, in years).....	14
Per capita cost of transportation.....	\$5	Kind and grade of present certificate.....	(1)
Total paid in teacher's wages.....	\$3,747	Normal school instruction (median, in months).....	18
Annual cost of education.....	² \$9,210	Days' attendance at institutes.....	2
Per capita cost of education based on enrollment.....	\$34	Reading circle, books read.....	0
Cash on hand at end of year.....	\$1,217	School journals taken, 1910-11.....	2
Volumes in library.....	785	Months' experience in teaching.....	36
Volumes added during year.....	50	Days employed in school, 1910-11.....	180
Children of school age.....	337	Wages per month, 1910-11.....	³ \$45
Enrollment.....	270	Cost of board, room, and travel, per month.....	\$18
Average daily attendance.....	252	Visits by superintendent.....	1
Percentage of enrollment based on census.....	80	Length of his visits, in hours.....	$\frac{1}{2}$
Percentage of attendance based on enrollment.....	93	Visits by district officers.....	19
Days of school.....	180	Length of their visits (median in hours).....	$\frac{1}{2}$
Different teachers.....	9	Visits by patrons.....	75
Median wages per month (exclusive of superintendent).....	\$45	Length of visits, in hours.....	$\frac{2}{3}$
Estimated legal voters.....	260	Homes visited by teachers.....	77
Voters at annual meeting.....	60	Social gatherings attended by teachers.....	58
Women voters at meeting.....	11	Social gatherings managed by school.....	12
		Public entertainments given by school.....	7

¹ Life, 62 per cent; second grade, 25 per cent; third grade, 32 per cent.

² The item for "Annual cost of education" includes \$1,000 paid on debt, \$600 paid for enlarging site and improving building, and \$600 paid for electric and water facilities.

³ Superintendent, \$110.

By vote of the district the consolidated school was dissolved, taking effect at end of school year of 1913-14. The reorganization leaves the central district with some territory additional to the original central district and three outlying districts, where separate schools, two one-teacher and one two-teacher schools, were opened in September, 1914.

Most of the reasons for the dissolution are indicated in the lessons of experience quoted from the superintendent.

The causes of the failure which are most frequently heard in the community are:

1. Factional strife among the people.
2. The high tax rate.
3. The long hours for small children.

Explanations offered by outside observers include the following:

1. A too rapid expansion of the annual maintenance budget.
2. Aggressive distrust and jealousy on the part of a few taxpayers who were not taken intimately enough into the confidence of the superintendent and members of the board of education.
3. An honest conviction on the part of some intelligent parents in the outlying districts that an elementary school within walking distance of the home is both cheaper and better.

One man in the outside detached part of the area tells me that, "The scheme is all right, but we did not know enough to run it." Another says the same thing in attributing the failure to the "jealousness" of certain individuals.

(C) THE PORT WING CONSOLIDATED SCHOOL, PORT WING, WIS.

By W. E. Larson, State rural school inspector.¹

Port Wing is a small unincorporated village situated on Lake Superior, in Bayfield County. The country around it is yet comparatively new, although it has been developed quite extensively during the last few years. This part of the State has great possibilities, and it was because of this fact that some of the leading citizens of the community planned the school system of the town of Port Wing.

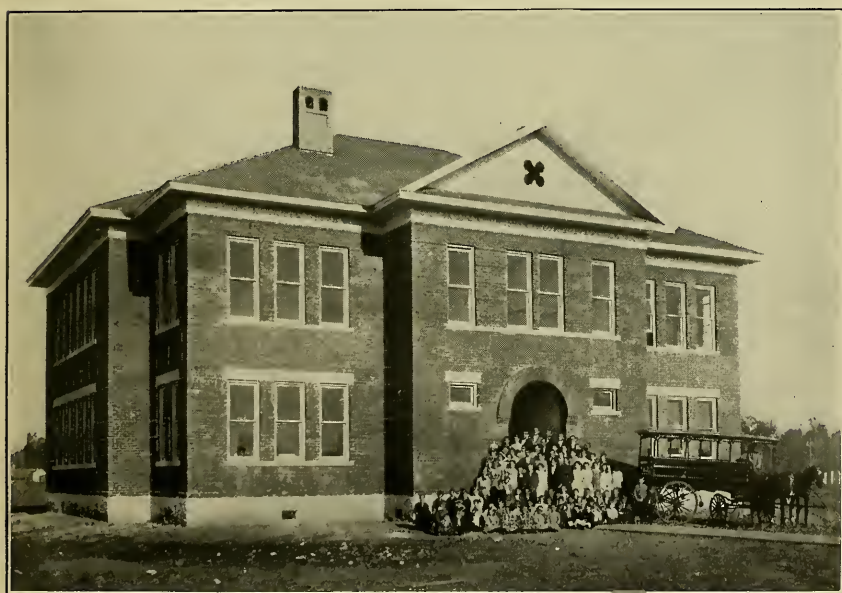
In 1894 a small mill was erected at the village and a school was organized. By 1898 the number of pupils had increased to such an extent that a two-department school was established in two buildings, and about 3 miles away a smaller school was located in a log schoolhouse. In 1900 the town of Port Wing was organized and the township system of school government was established. Because of the increased school attendance the school authorities were compelled to provide added school facilities. Some of the leaders, anticipating the growth of the community, decided to erect a building which would accommodate at least 400 pupils and provide transportation for the children living at a distance. The school 3 miles away was closed. Instead of building schoolhouses in various parts of the town as settlers moved in the school board provided transportation facilities.

When the township system was abolished in 1911 and the district system substituted the whole town of Port Wing was organized as one single and independent district.

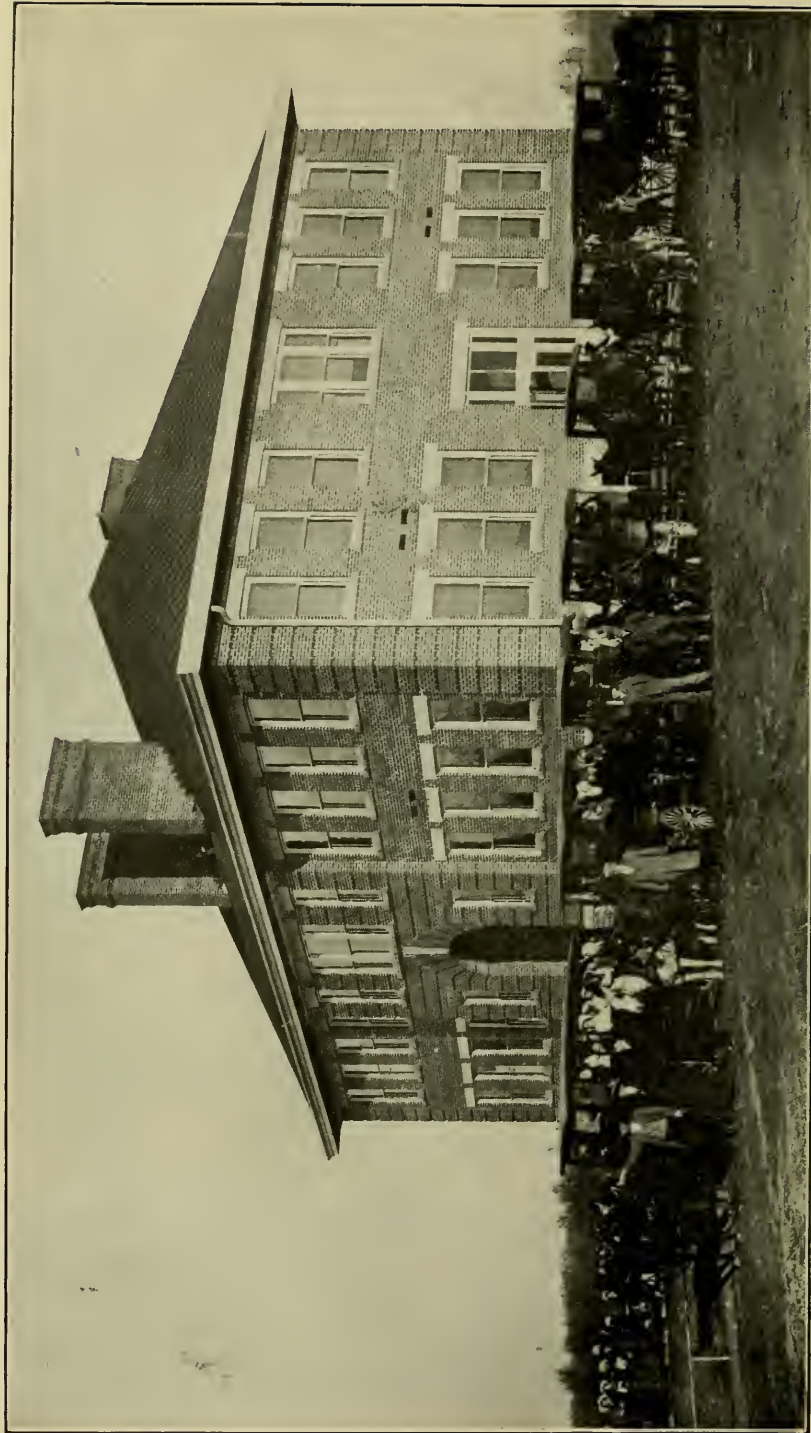
¹ Collaborator, U. S. Bureau of Education.



A. PORT WING CONSOLIDATED SCHOOL, WIS.



B. MORO CONSOLIDATED SCHOOL, ARK.



A CONSOLIDATED SCHOOL AT MAYSICK, KY.



FIRST SCHOOL BUILDING IN THE DISTRICT, BUILT IN 1828.



MACDONALD CONSOLIDATED SCHOOL, 1906.



GRASS PLOTS, MACDONALD CONSOLIDATED SCHOOL.



CABBAGES GROWN BY PRIMARY CHILDREN.

THE MACDONALD CONSOLIDATED SCHOOL, KINGSTON, N. B.

The school building itself is an eight-room structure and built of the best materials. The present cost, including heating system and equipment, is approximately \$30,000. In the erection of the building the town was aided by a loan of \$10,000 from the State trust funds, which amount was paid in three years. The building was erected at a time when the lumbering industry was prominent. Owing to the foresight of the leading men of the community, the settlers now have an excellent school building which is the pride of the town.

At the present time five teachers are employed. The district maintains what is known in Wisconsin as a "State graded school of the first class." Nine grades are being maintained. The principal of the school holds a State certificate, and the other teachers have qualifications required by the State graded-school law. The amount paid for teachers' salaries during the year 1911-12 was \$2,520. The total enrollment is about 150 pupils. The length of the term is nine months, the minimum required in all State graded schools. The total amount expended for school purposes the past year was approximately \$6,000. Of this sum about \$1,000 was spent for permanent improvements and equipment, leaving the actual cost of maintenance approximately \$5,000. The assessed valuation of the town of Port Wing is approximately \$500,000.

During the past year five wagons were used to transport the children to school. Four of these were in operation the entire school year, and the fifth was used six months. The transportation routes are laid out by the board and let out by bids to responsible drivers. The total cost of transportation for the past year was \$1,255.41. The drivers receive from \$30 to \$38 per month and furnish their own wagons. These wagons are covered and the children are kept comfortable. Not a day has been lost by the drivers since the system was established. Only a very few children are being transported more than $\frac{1}{2}$ miles. The attendance is excellent at all times.

The school building contains one large assembly room, which is used for public meetings of various kinds. The community has an excellent opportunity to make the school a social and civic center. As the country becomes more settled and the school attendance increases, it is possible to extend the course so that more grades may be added. Eventually Port Wing will have a high school of its own in which the young people can get an advanced education right at home. The course of study for State graded schools includes instruction in agriculture, and the subject will do much to get the young people interested in the industrial development of the surrounding country.

To give the children of the town school facilities locally, it would be necessary to maintain at least five schools in addition to the graded school at Port Wing. Most of these schools would have a small

attendance, and some of the children would have a considerable distance to walk. There is no comparison between the present school facilities and what they would be if small schools were established in various parts of the town. Though there was considerable opposition to the plan at the beginning, there would now be a unanimous opposition to return to the small-school plan. The cost under the present system is not greater than the cost would be if small schools were established and maintained in a proper manner.

(D) THE WOOL MARKET CONSOLIDATED SCHOOL, HARRISON COUNTY, MISS.

By W. H. Smith, State Superintendent of Public Instruction, Mississippi.¹

In Harrison County, Miss., about 8 miles out from the Gulf and in a typical south Mississippi rural community, may be found the Wool Market consolidated school, the subject of this brief study. Three medium-sized one-teacher schools—Coalville, King, and Oakhead—were brought together two years ago to form this school near the Wool Market post office, on the Biloxi River.

The new house, built by private subscription at a cost of about \$2,000, was located within 2 miles of all the children in two of the old districts, while a transportation wagon was used to bring in from 25 to 30 pupils from the Oakhead district, about 3 miles from the new schoolhouse. The territory of the new school covers 27 square miles and now has within its bounds 134 children of legal school age.

Each of the teachers in the abandoned schools, having from 30 to 40 recitations daily to cover the eight grades of the elementary and grammar grades, had no time to do high-school work, and on that account had no high-school pupils. As a result of those conditions the patrons who were able financially to bear the expense sent their children out of the community to school as soon as they were ready for the high school, at an annual cost of from \$150 to \$200, while the larger number were forced to turn aside to take up life's duties and responsibilities with only the meager training obtained in these little schools. Such conditions obtain in three-fourths of the schools in the South. The Wool Market consolidated school, now serving the same territory, has 23 high-school pupils—16 in the ninth grade, 5 in the tenth grade, and 2 in the eleventh grade—and 20 pupils in the music and expression classes under special teachers.

The aggregate average attendance for the original schools was 60 pupils, according to the records, while the average attendance now in the consolidated school is 110 pupils, with an enrollment of 125. There are only 9 children of school age in the district not in school.

¹ Collaborator, U. S. Bureau of Education.

In the old schools the number was too small to form an attractive social center and to justify the employment of special teachers, but the new school is fast becoming the center of all social activities of this larger community, employs special teachers in music and expression, and has in the faculty teachers qualified to give instruction in practical agriculture and domestic science. In the interhigh-school contests last spring the Wool Market consolidated school, though only two years old, captured a fair share of the medals in declamation and recitation, while the girls' basket-ball team claims the county championship.

The school is located on 5 acres of land, which are used for playgrounds, school garden, and practical agricultural demonstration work. Dr. Welch, the community physician, lectures to the school once a week on hygiene and school and home sanitation; and Mr. W. A. Cox, a trustee of the school and a practical farmer and horticulturist, gives the school weekly lectures on agricultural, horticultural, and allied subjects.

After trying the consolidated school two years the patrons and other citizens of the Wool Market community voluntarily levied a tax of \$7 per thousand on the property of the district to support the school for an eight or nine months' session.

Comparative statistics.

Cost of the three teachers in old school per month-----	\$128
Aggregate attendance in the three schools-----	60
Average cost per pupil per month-----	\$2.13
Cost of the three teachers in the elementary and grammar school grades of the consolidated school, per month-----	\$150
Entire cost of the one transportation wagon, per month-----	\$50
Average cost per pupil per month in same grades-----	\$2.22
Cost of the four teachers in entire school and of the school wagon, per month-----	\$280
Average cost per pupil for the elementary and high school-----	\$2.54

The Wool Market school, with its four teachers and adequate high-school advantages, costs the community only 41 cents per pupil, or a total of \$45 per month more than the three little one-teacher schools. To send the 23 high-school pupils out of the community for their high-school education would cost the community at least \$1,000 more than this entire school cost the community and county for eight months. Mr. W. A. Cox, referred to above, is authority for the statement that the value of land in the community had increased during the two years as a result of the good school from \$10 per acre to \$25 per acre.

What has been accomplished in the Wool Market school can be done in almost any community in the South. This and similar instances that might be mentioned lend strength to the contention that

adequate school advantages can be provided for the country children in the community near the farm home.

(E) GARFIELD CONSOLIDATED SCHOOL, STATE OF WASHINGTON.

By Margaret Craig Curran, formerly of Washington State Department of Education.¹

The Garfield consolidated school, which draws its pupils from the original Garfield district and several districts outside, is situated in the town of Garfield, in Whitman County. Garfield has a population of somewhat more than 1,000 inhabitants. It is surrounded by rich farming country and is located on the Northern Pacific and Oregon Railroad & Navigation Co. railroads and the Inland Empire Electric Railway.

The circumstances that led to the consolidation of the districts were largely accidental. Consolidation had been considered for some time by two or three country districts for the purpose of establishing a country high school. Several families, however, were opposed to the plan for the reason that they were as close to Garfield as they would be to the proposed high school, and they could not see the necessity of another building when all the pupils of the territory could be accommodated in the Garfield schools. This fact is of interest because it drew the line dividing the people for and against consolidation with Garfield.

The second step of the accidental order was taken in December, 1908. The teacher in district No. 151 failed to pass the teachers' examination, thus leaving the school without a teacher. Teachers that year seemed hard to find, and the school was closed. This district had as a director, Mr. E. J. Byrne, who was perhaps the leader in the opposition to the country high school and the leader in favor of consolidation with Garfield. It was the most natural thing that he should hitch up his team and take his five children to the Garfield school. Others of the district followed his example, and the records show that almost the entire enrollment got a taste of the town school before the year was over. The children enjoyed and profited by their attendance at the Garfield school. The county school superintendent, Mr. N. D. Showalter, was in favor of the plan of consolidating the several districts with the Garfield district. The matter was presented to the people of the various districts and a petition was prepared. Strong opposition was found; there were many who doubted the advisability of organizing a consolidated district some 10 miles in length and 6 miles in breadth. In this part of Whitman County the soil is heavy, black, and sticky. The hills are numerous, long, and high. The roads are the roads of a new country. They are

¹ Collaborator, U. S. Bureau of Education.

being improved, but only as roads in a farming community where the farms run into the hundreds of acres are improved. In order that the children might arrive at the school in time for the 9 o'clock bell, it was necessary for the wagon to start with the first children not later than 7 o'clock in the morning. This in the short days of winter was early indeed. From 7.30 in the morning until 5 in the evening was a long, hard school day.

In the face of all these difficulties the great majority of the people believed that the children would be better cared for in the Garfield school than they would be cared for in the country schools. At the hearing it was clearly shown that a majority of the people were in favor of undertaking this plan, and a consolidated district was, therefore, formed by the county superintendent in June, 1909, by uniting two rural school districts, numbered, respectively, 21 and 151, with No. 36, the Garfield district.

The records show that at that time district No. 21 had an average daily attendance of 37 pupils and had had a 7-months' term of school during the last year. District No. 151 had an average daily attendance of 12 pupils, and the school had been in session 9 months. At the time these districts were consolidated, Garfield was maintaining a school having all the grades, including a four-year high school. When the children from the rural districts were brought in, their classification scattered them through the different rooms, so that it was not necessary to employ any additional teaching force in order to take care of them. The pupils below the high-school grades were given the advantages which the children of any city school enjoy. Therefore, the boys and girls from the farms had equal opportunity with those of the city.

The usual argument that consolidation is to make one large district of several small, struggling ones is not to be applied too rigidly in the Garfield case. Before the consolidation, district No. 21 had an enrollment of 49 pupils and district No. 151 had an enrollment of 23. As each district had a large railroad valuation, the tax rate was below the average, and at the hearing it was shown that a higher tax rate would be necessary under consolidation. However, the people wanted to give their children the best possible opportunity to acquire an education. The records show that the tax rates have been from 3 to 5 mills higher on the old country districts since the consolidation. For this cost the children secure the privilege of attending a graded school with all its advantages over the usual rural school.

Beginning with the fourth grade the pupils are sent to the high school each week, where expert instruction is given them in manual training and the domestic arts. When they reach the high-school grades, work in these branches is continued. They have the advantage of a four-year accredited high school, in which they can take courses

which will prepare them for entrance to any of the higher institutions of learning in the State of Washington. Two years' work in a commercial course can be had in this school. This district, as enlarged by consolidation, was not content to remain simply a graded school and high school of the ordinary type. The people wished more. A broad course in manual training was introduced; also a thorough course in domestic economy. These courses were popular from the first, as evidenced by the fact that of the 450 pupils enrolled in the schools, 111 boys took the mechanical course and 115 girls took the economy course in the year 1911-12. Teachers who have had special training and who are graduates of accredited institutions have been employed to teach these subjects, and the investment has paid. Bench work, turning, home repair, along with a full course in mechanical drawing constitute the principal work in the manual training department, while in the domestic economy course, cooking, sewing, and home-making arts are taught.

A course in agriculture was added in 1913. This includes a course in chemistry, conducted to augment the course in cooking on the one hand and chemistry of the soil on the other. The teacher of agriculture is employed part of the time in advising farmers in the rural sections.

Consolidation has been a benefit in the community in another direction. A college-extension plan has been arranged whereby special instruction is given the women of the community in domestic economy. A week is set aside for instructing the men in agriculture, animal husbandry, and kindred subjects. For these courses instructors from the State college at Pullman are secured.

The opposition to consolidation is dying out, as the many advantages are becoming more and more apparent. One of the advantages which the farmers are enjoying as much as any other is the notable improvement made on the roads, especially along the routes which the transportation wagons take.

The per cent of country pupils continuing throughout the course in the Garfield schools shows a noticeable improvement over conditions before consolidation. The country children are far more regular and punctual in attendance than the town children. While the hours are long and the distance traveled in many cases is great, the health of the pupils is good; the children are not exposed to wet and cold as they would be if they were attending the rural schools where transportation is not provided.

Four wagons were used to transport pupils to and from the Garfield school in 1911-12. There has been no difficulty in securing the services of good, reliable men as drivers. The discipline in the wagons and the attitude of the people toward transportation depend largely upon the character of the driver, and the Garfield district

has been fortunate in this respect. Splendid discipline and well-managed wagons have resulted in a favorable attitude of the people toward transportation of pupils. The cost of transportation averages \$80 per month per wagon.

(F) MORO CONSOLIDATED SCHOOL, ARKANSAS.

By J. L. Bond, State supervisor of rural schools, Arkansas.¹

Moro is a thriving village in the west-central part of Lee County, in the fertile St. Francis-Mississippi Valley, in one of the richest agricultural counties of the State, the land being generally level and easily cultivated. The roads are only fair. During the winter and spring months some of them become very "bad," but they are now being improved. Within the last few months a \$100,000 county bond issue for road-building purposes has been authorized.

Three small districts were consolidated to give the larger territory needed for the consolidated school. District 15, which might properly be designated the base for the consolidation, was composed of only 10 sections, while districts 14 and 36 contained 12 sections each.

District 15 had a small, one-room school building. The building was a frame structure, very ordinary and poorly furnished. The average length of school term was about five months in the year, with small attendance. School interest was lagging.

Conditions in district 14 were very similar to those in district 15. The school building was small, with one room, very ordinary and poorly furnished. The average annual length of school term was from four to six months.

District 36 had no school building. A school had not been taught in this district for a number of years, the last one having been at the residence of one of the school patrons.

As criteria of the interest shown by the people in the schools taught in these two districts the year preceding the consolidation, the following statistics are given:

Statistics of school districts.

Districts.	School enumeration.	Pupils enrolled.	Percentage enumeration enrolled in school.	Average daily attendance.	Percentage enumeration in daily attendance.
District 15.....	89	49	55	35	59.3
District 14.....	37	25	67.5	19	51.3

The facts and statistics given above regarding these districts refer only to the schools for the whites.

¹ Special collaborator, United States Bureau of Education.

The agitation for consolidation of the districts began first in district 15. A number of the people in the district began thinking, talking, and working to build up a better school. Consolidation of districts suggested itself; then opposition arose, almost violent on the part of some. The sentiment for consolidation in all the districts to be affected crystallized slowly but gradually.

A public mass meeting was called at Moro during the winter of 1910. The question of consolidation of the districts was discussed, and it was decided that steps should be taken at once to effect the consolidation of the districts. An election was called in each district. The vote was almost unanimous in favor of the consolidation of the three districts. At this same election six directors were elected for the consolidated district.

A beautiful school site, well located, containing a little more than 2 acres, and valued at \$800, was selected. Plans for a brick building, to cost approximately \$9,000, were secured and the erection of the building was begun in July, 1911. The building contains four large classrooms, with accompanying cloakrooms, principal's office, a library room, and hallways. When the needs and conditions demand it, an addition can be built without marring in any way the architectural effect of the building.

As there was some opposition to a bond issue for building purposes, the board of directors decided to erect the building without the issuance of bonds. They have so far adhered to this decision, and while the district is in debt the board thinks that in another year or two it will be free of debt. Meanwhile a good school is being maintained.

School in the consolidated district opened in September, 1911. The building had not been completed and school was begun in a church.

A wagonette was bought by the district and a transportation route arranged. The wagonette has capacity for 30 children and cost \$289.54. The transportation route was so arranged that 26 children could be conveyed to the school, the wagonette making a distance of 11 miles on the round trip. A thoroughly responsible driver was secured, a man who had children of his own to be carried to school. The amount paid the driver per month was \$57.90; he furnished his own team and paid all the costs of keeping it. The district agreed to pay for all needed repairs on the wagonette. For the year, \$1.50 was paid out for repairs.

At first there was considerable opposition to the idea of transportation. It was urged that such a thing as transportation of children was not practicable. Some parents did not want their children to go so far away from home to school, but they soon found that it was entirely practicable.

There were two teachers at first, a principal and an assistant, who was the principal's wife. The enrollment at the beginning of the school was only 74, but it grew rapidly. A third teacher was soon required. The school made application to the State board of education for State aid as a two-year State high school. The aid was granted and the board of directors employed a third teacher.

At the close of the year the enrollment had reached 170, distributed as follows: First grade, 16; second grade 15; third, 12; fourth, 17; fifth, 18; sixth, 22; seventh, 19; high-school grades, 51. The daily attendance averaged approximately 80 per cent of the enrollment.

Accurate statistics as to the cost of maintaining the schools before the formation of the consolidated school are not available, and for this reason no real comparison can be made of the relative costs of maintenance of the small district schools with that of the consolidated school. The gross expenditures for school purposes for the first year of the consolidated school, as reported, were \$2,186, or a total of \$12.86 per enrolled child.

With a larger and better school, there has come a splendid school spirit, both on the part of the children and patrons. Games of various kinds were provided for the children, and school life became attractive and inviting to the child. The people are proud of their school and are enthusiastically supporting it.

The population has materially increased as a result of the establishment of the consolidated school. Property values have steadily risen. Lots that formerly sold for \$50 are to-day bringing \$200. The whole community life has been touched and quickened.

VII. MACDONALD CONSOLIDATED SCHOOL MOVEMENT IN CANADA.

By C. H. Lane, Chief Specialist in Agricultural Education, U. S. Office of Experiment Stations.

This was a movement for the improvement of Canadian rural schools. Four consolidated rural schools, as object lessons, were provided by the Macdonald rural school fund, one in each of the four Provinces—Ontario, New Brunswick, Nova Scotia, and Prince Edward Island.

They were located at places chosen or approved by the provincial departments of education. In each case a new building was erected to take the place of the small schools which at that time were serving the sections proposed to be consolidated. They were equipped with ordinary classrooms and assembly halls, and also for manual training, household science, and nature study, and school gardening. A

consolidated school board was elected according to the school law of the Province concerned.

THE SCHOOL AT MIDDLETON, NOVA SCOTIA.

The school in Nova Scotia was opened at Middleton in September, 1903. The proposition made to the people in and about the town of Middleton relative to the establishment of a Macdonald consolidated school, by Dr. James W. Robertson, agent for the Sir William C. Macdonald school fund, was that if eight sections would unite and contribute an amount equal to the average payment by each individual section during three previous years for school purposes the fund would build, equip, and assist to maintain for three years a school in the town of Middleton, where in addition to the subjects generally taught in the common and high schools at Nova Scotia, there should be taught manual training, home economics, and agriculture. A school garden was also to be established in connection with the school for the purpose of teaching practical agriculture and carrying out experiments in agricultural operations. The children from the surrounding sections or school districts should be conveyed to and from the consolidated school in school vans.

This agreement was ratified by the Nova Scotia legislature. There were then built out of the Macdonald fund a brick and stone building and a large barn for the sheltering of the vans and van horses. The fund also furnished the necessary equipment for the school. The original cost was about \$25,000. In addition Dr. Robertson contributed from the Macdonald fund a sufficient fund to defray all the expenses required over and above the amount contributed by the individual school districts. For the first year this cost the Macdonald fund nearly \$8,000. One item, that of conveying the children to and from the school, during the first year, was \$5,377; it was slightly less during the next three years. The average yearly draft upon the Macdonald fund during the first three years for all school purposes was about \$7,500, while the total amount from other sources during each year was about \$3,300. Hence, the school was run at an expense of nearly \$11,000 a year.

According to Mr. G. B. McGill, first principal of this school, the school was ideal in its purposes. The comparatively large staff of teachers, together with all needed apparatus, was sufficient to make it greatly superior to any of the individual country schools. The school soon became justly popular. A better system of classification of pupils contributed to more thorough classroom work. The manual training and home economics department became very attractive, not only to pupils, but to parents as well, and lent a new interest to school life. The large school garden was by no means the least interesting and valuable. Here the pupils conducted their

miniature farms with some interest and a profit. Demonstration plats were also arranged and cared for by the pupils under the supervision of the principal. The school, too, maintained a large cadet corps, which achieved some proficiency in military drill. During these years nature study was a very prominent feature of the school and did much to give a new life to school work.

The pupils, in a large measure, appreciated the changed conditions. They seemed interested and happy in their work. It is worthy of note, says Mr. McGill, that notwithstanding the additional work entailed upon the pupils by the introduction of manual training, home economics, and agriculture, they were enabled at the end of each school year to obtain better results than in former years from the provincial examinations on the purely scholastic subjects formerly taught alone in the public schools.

A new agreement was effected for the second three years of consolidation whereby Dr. Robertson donated out of the Macdonald fund \$400 for each individual school district that remained in consolidation. The various districts unitedly were to defray all other expenses. The new school board, by reducing the number of teachers and eliminating certain other expenses, were enabled to continue the school, with results quite similar to that of the first three-year period.

At the end of this period all help from the Macdonald fund was withdrawn, in consequence of which several school districts, except one small district adjacent to the town of Middleton, withdrew to their former conditions of school work, not, however, without some notion of new ideas in educational methods. One of the original outside school districts continues sending in all its pupils. One other district has made spasmodic efforts to rejoin the Middleton consolidated school, but the cost of conveying the children has been the great difficulty in the way of continuation. Thus the district which was unable to maintain a public school on a local cost of about \$125 would require \$600 a year to convey the school children of that district to and from a consolidated school. The entire cost of a school in such a district, including municipal and provincial grants, would be less than \$300.

The present Middleton Macdonald school continues the departments of manual training and home economics. Strange to say, the agricultural work of the school has been abandoned, and the study of classics more generally introduced. As Mr. McGill declares, there can be no doubt that the manual training, home economics, and agricultural work of the school contributed toward the building up of great interest and improvement in rural life, and it was this that Sir William C. Macdonald had in view when he made his generous donation for the establishment of the school.

Dr. McKay, superintendent of schools for Nova Scotia, writes:

It looks very much at present as if it is easier to provide a teacher and a small schoolhouse than to transport the school 3 or 4 miles to a well-graded educational institution; and because it is cheaper, it is considered to be better. There is need of education on the difference in value between the cheap miscellaneous rural school and the well-graded village school. I find also that pupils become tired of starting so much earlier in the morning in order to be ready for the vans and of the monotony of the ride in the van both to and from the schoolhouse. They appear to enjoy the freedom of traveling on the road a short distance better than an enforced long ride every day.

We find it to work at present only in attaching a small settlement which can hardly support a school by itself to the nearest school center. That means, as a rule, that our consolidations consist of the union of one or two small sections with a central one. This we find to be useful, and every year a few more of such small consolidations are organized.

THE NEW BRUNSWICK SCHOOL.

The New Brunswick school is located at Kingston, a village about 25 miles east from St. John. The village is 8 miles from the railroad, situated on the top of a hill, and contains a few neat farmhouses, a church, and the Kingston Macdonald consolidated school. The school was opened in September, 1904, and served an area that was formerly seven rural school districts. Kingston, of all the towns in New Brunswick, was selected for this demonstration because few places could offer more natural obstacles to the success of such an enterprise.

All the districts which voted to consolidate were ordinary country localities, sparsely settled. Some of them maintained school only part of the year. In many the schoolhouses were poor and ill-equipped. The consolidated districts were to contribute what they had been paying for school purposes in the past. The Macdonald fund was to pay all additional cost for three years. At the end of that time the people were to decide by vote whether to continue the consolidated school and assume the entire responsibility for its support or to go back to the isolated, meagerly equipped, poorly taught one-room district schools. This school also received annually provincial grants, as does other consolidated schools of a similar character, to the extent of \$1,000 and one-half the cost of the transportation of the pupils.

The Macdonald building is a commodious structure well placed in a lot of about 3 acres. Near the road the grounds are laid off with gravel walks and well-kept lawns and planted with numerous shade trees brought from the woods and set out by the pupils. Back of the building is a playground and a school garden and orchard. At one side is a long low stable with seven doors, each large enough to admit a pair of horses and a van. The basement of the building is large

and airy and is used as a playroom in bad weather. On the first floor are two rooms for the younger pupils, a storeroom, and a manual-training room well equipped with benches and tools. On the second floor are two rooms for the more advanced pupils, a laboratory, a library, and a room for household science, which includes sewing, cooking, laundry work, home nursing, and sanitation. Under the roof is a spacious assembly room. The pupils are conveyed from their homes in vans.

The enrollment in the seven districts before consolidation was 125; after consolidation it arose to 166 the first term and 175 the second term. While the average attendance in the nonconsolidated schools was 44 per cent of the enrollment, after consolidation it arose at once to 84 per cent. In considering these figures it must be borne in mind that the school year is 40 weeks long, and the services of the older children are quite as valuable at home as in other farming communities. Although 140 children out of a total of 160 had to be collected daily over routes varying from 3 to 5 miles each way, in the unusually severe winter of 1904 on no day was the attendance less than 50 per cent, and in the winter of 1905 no van was late.

In speaking of this particular school, Mr. R. P. Steeves, director of elementary agricultural education in New Brunswick, says that the school has been entirely successful from the outset and has done excellent work. Many pupils began the foundation of a good education which after graduation they continued either at normal school, college, or other institutions. Many pupils who have been successful in various lines would doubtless under the old system never have arisen above grade 4. The difference between the course of study here and in the ordinary country school is sufficiently suggested by the difference in equipment. The orchard, the grafting tools, the pruning knives, the spraying apparatus, the kitchen with all of its household implements, the sewing tables, the benches and tools, and the laboratory for indoor work in winter—all utterly foreign to the ordinary school—are here for a definite use.

At the end of the three years (1907) all the districts voted to continue the consolidation, and Sir William C. MacDonald continued his financial assistance to the extent of \$1,200 a year for three years. After two years under this plan the building was burned. Before rebuilding the entire scheme was again submitted to the people, when it was decided to enter into a regular legal consolidation, all the several districts being merged into one, under the management of a trustee board. This is the present organization. The Macdonald assistance has been withdrawn entirely, and the school is supported by the people and grants from the provincial government.

There are only three on the school staff at present. All the industrial subjects, however, are continued. The fact that last spring the

pupil making the highest average in grade 8 for the county was a regular attendant at this school, shows, according to Mr. Steeves, that the ordinary subjects of instruction are not neglected. The expenses of the school have considerably increased. The school tax is now upward of \$2 on \$100 of assessable valuation of property. The total assessable valuation of the entire district is under \$80,000.

Mr. Steeves writes:

From this experiment I am fully convinced of the advantages of consolidation. The cost will be greater, but real value is obtained for the money. The fact that twice after the Macdonald school was established the people affirmed the principle and continued the school shows that its value is recognized. Many who have no children to send to school complain of the tax, but most of them admit that the school is a credit.

As a test of consolidation the Kingston experiment was a severe one. The population is sparse, and consequently the distance the vans travel is long. The roads are quite rocky and hilly, the expense of conveyance is heavy, and the winters are cold.

In more favorable localities, with a small number of vans for conveyance, and more level country, the scheme should prove just as advantageous educationally and not so expensive.

It may be of interest to note the general attitude of the people of this Province toward the matter of consolidation. In the report of the special agricultural commission appointed in 1908 to inquire into the agricultural conditions of the Provinces and the means of improving them, the question of consolidated schools was considered. A series of questions dealing with the matter was sent to the boards of trustees of the 1,420 rural school districts. Replies were received from 219. Of these, 24 districts would support consolidated schools, 106 districts were not in favor of such schools, 22 districts expressed themselves as willing to submit to higher taxation for consolidation purposes, and 117 districts did not want higher taxation for such purposes. So far as the schools answering represent all of the districts, this shows that only about 20 per cent of the trustees of the New Brunswick schools five years ago favored this method of improving the status of the rural schools.

THE SCHOOL AT GUELPH, ONTARIO.

The Macdonald consolidated school at Guelph, Ontario, commenced in November, 1904, under practically the same conditions financially as those organized in New Brunswick and Nova Scotia. Five districts were consolidated; three have withdrawn, so at the present time two districts comprise the consolidation, with about 40 additional pupils from the surrounding districts in attendance. These five districts were rural districts surrounding the city of

Guelph, which is an independent school district and was not included in the consolidation. Children from the three districts withdrawing were conveyed across the city to the new school. That the school won the approval of parents is evidenced in the fact that at the close of the three-year trial period, when the vote to decide whether or not to continue in consolidation was taken, only one rate payer with children at school in three retiring districts voted for withdrawal. In every case there was only a small majority against continuing, even with the necessity for increased taxation before the rate payers.

The kind of education which this school was established to demonstrate still continues. The pupils receive special instruction in elementary agriculture, home economics, and manual training. With the approval of the Ontario department of education, the continuation classes have adapted their studies especially to fit the needs of the home and the farm.

In discussing this form of education a bulletin of the Ontario Agricultural College at Guelph states that—

while the principle of consolidation has been confirmed in undoubted pedagogical successes, these two educational reformers (Sir William C. Macdonald and Dr. James W. Robertson) have been in advance of their times. None of these Provinces was ready to incorporate into its body educationally the highly organized rural graded school that had met with a large and favorable acceptance in another country.

In explaining the apparent failure of this form of education, it was felt that the condition of the rural schools of Ontario was not so bad as to require any large change in organization. The rural people are conservative. They were getting for their children as good an education as they wanted for them. They had not arrived at the point where they considered industrial subjects of any special significance in the education of their children. The experience of six years with a consolidated school was not a sufficient force to create a public sentiment which would sustain and expand the plan of consolidation. It is thought by some that it would have been better to have begun the schools on a smaller scale, taking in fewer school districts, and although it would have prevented possibly the most satisfactory introduction of elementary agriculture, home economics, and manual training teaching, it would greatly have lessened the costliness of the experiment and saved the hardest criticism of it—the increased expense.

THE SCHOOL ON PRINCE EDWARD ISLAND.

The Macdonald consolidated school on Prince Edward Island was opened early in the summer of 1905 at Hillsboro. Prior to this time each of the six districts consolidated had a one-room rural school

for the education of its children. The buildings in most cases were uninviting and the surroundings bare and cheerless. Boys over 12 years of age usually attended only a few months in the winter. According to a report of this school, issued in 1910, individual taxes in the original six districts ranged from 20 cents to \$5.20. The average contribution by the rate payers was but 11 cents on \$100 property valuation, and the total salaries received by the six teachers amounted to \$1,190.

For the first three years the six districts contributed nearly their previous assessment on property valuation, but at the expiration of that time three of the six districts remained in consolidation and agreed to pay 40 cents on the \$100 valuation. There was a voluntary fee of \$2 per pupil for the first three in the family. Pupils from outside districts paid a tuition fee of \$5. In addition to this the school received a statutory grant from the provincial government. Sir William C. Macdonald contributed \$1,200 as a lump sum, and the deficit was made up by Dr. James W. Robertson.

Courses of study at the school included, in addition to what was given in the original six schools, school gardening and nature study, manual training, home economics, drawing, and physical culture. All these subjects were taught by specially trained teachers.

During 1908-9 the work of the school was done by five teachers, but in 1910 an extra teacher was appointed so that the principal might be free to put on a special course for farmers' sons. This special course for farmers' sons included, in addition to the regular academic subjects of an ordinary school, live stock, poultry, dairying, farm crops, agricultural botany, horticulture, farm chemistry, physics, and manual training.

While this school from the outset was apparently successful in bringing about the form of education which its promoters had in mind, the superintendent of education of the Province writes, under date of August 27, 1913:

I regret very much to have to inform you that the Macdonald consolidated school at Hillsboro has been closed for over a year. It did excellent work during the several years in which it was in operation and fulfilled the highest expectations of its promoters, but the school districts in which it was located did not seem to appreciate its advantages to the extent of being willing to contribute sufficiently to the expenses of running it, and, therefore, as soon as Sir William C. Macdonald and Dr. James W. Robertson withdrew their support (June 30, 1911) the school was allowed to close. The result is that the commodious building and excellent equipment remain idle, while the little one-room district schools are vainly attempting to do the work of educating the boys and girls of the community. * * * I am convinced that consolidation is the remedy for most of our educational disabilities, and I am not without the hope that the Macdonald consolidated school will yet be reopened.

VIII. AGRICULTURE AND DOMESTIC SCIENCE IN THE HARLEM (ILL.) CONSOLIDATED SCHOOL.

By C. C. BURNS, Principal.

The Harlem consolidated school, 6 miles north of Rockford, Ill., is the pioneer consolidated school in Winnebago County in establishing a course of study embracing agriculture, domestic science, and manual training. These advantages were made possible by the consolidation of four one-room country schools in April, 1910.

The petitions making possible consolidation were signed by 64 electors in favor of the movement and 16 against it. The trustees voted unanimously to consolidate, and an election was held to bond the district for \$17,700, which was carried. A school board was elected, and its first act was the adoption of a rule to employ only teachers who were either normal school or college graduates.

The consolidated school district comprises about 16 sections of land along the Rock River and an interurban electric car line. It is about 3 miles wide in the widest part and 9 miles long. The valuation of the taxable property last year was \$489,000.

The Harlem consolidated school has steadily grown and prospered. It is now in the fifth year of its existence, and has its equipment fairly complete and its course of study determined.

The course of study in agriculture begins in the seventh grade and is continued in the eighth grade. This follows a course of nature study beginning in the first grade. In the first year the child takes stock of what he knows about the things in the world out of doors. Later more particular studies of the earth, sky, animals, and plants are taken and work in gardens is begun. Every spring penny packets of seeds are bought by the children. Any child in the school may have a home garden, and practically all do have them. The nature study is a preparation for the agriculture that follows and for the science in the high school.

The course of study for agriculture in the seventh and eighth grades declares—

An attempt is made to interest the pupils in the chief industry of the community by a direct study of plants, animals, soil, and the conditions of agriculture rather than by mere textbook work.

The seasonable sequence of farm operations is taken advantage of. Thus the subject of weeds, plant diseases, farm crops, corn judging, and silos are taken up during the fall, when such operations are of most interest on the farm.

During the late fall and winter farm animals are studied.

With early spring comes the testing of seeds, the care of hotbeds, followed by the study of the favorable conditions of plant and soil.

School and home-garden work is carried on during the spring and summer months. A fair is held each fall.

The first summer of the school-garden work the children were organized into committees, two or three children visiting the school garden each week during vacation and taking proper care of it. The garden was in beautiful condition in the fall.

The next summer practically all the children had home gardens requiring their attention, and it was voted best to pull up the school garden rather than let it go to weeds.

The organization of the home-garden work has been fairly complete here. The sense of ownership which home gardens engender, together with the possible profit to the child financially, make them popular. The convenience of the home garden is another advantage over the school garden. Work in the home garden can be done at odd moments, and many times children help provide vegetables for the home in this way. Parents become interested in the work of the child and oftentimes give necessary supervision.

The greatest good which the home-garden work has done here is to connect the home and the school. This has been brought about by the fair held each fall at the school. The grange in this community had held fairs each fall probably since its organization, in 1873. I suggested that we hold our fair together and call it a community fair. The plans were carried out successfully in every way. The next year I asked two farmers of the community to help me with our arrangements, which they did. In connection with the part of the children's gardens the grange and the people of the community were to take, I proposed that we hold a plowing match and an all-day picnic for the entire community. In spite of bad weather in the morning, the fair was a success. Following the work up, it was proposed that a permanent organization be formed and officers elected to take entire charge. Last March a community meeting was held at the school and officers elected, with a special committee of the older boys and girls to take charge of their part of the fair.

Agriculture in the high school naturally divides itself into four units—plants, animals, soils, and farm management. In the course of study a half year's work in each unit is required of the boys for graduation. One year's work in manual training is also required, one-half the time for mechanical drawing and the other half with practical woodwork.

Boys specially desiring more work in agriculture may receive another semester's work in plant husbandry and one in animal husbandry.

Two years of agriculture are required, with one year elective, and one year of manual training, which we expect to revise and improve so that it will really be a course in farm mechanics.

The work in agriculture is arranged so that the student may receive training in the regular high-school sciences before taking up the agricultural work.

The science work other than agriculture is as follows: General science throughout the freshman year, botany and physiology during the second year, chemistry in the third, and physics in the fourth year.

General science is outlined to include five main features: (1) The air; (2) ice, steam, and water; (3) work and energy; (4) the earth's crust; and (5) living things. The most excellent results, we believe, are being obtained in general science as foundation work for all science work.

During the second year botany is given. The fundamental principles of plant life are taught. The work is a preparation for the work with plants, fruits, and grain study in agriculture. In the botany class the economic plants where applicable to the point in hand are used.

Chemistry in the third year precedes the work in soils by a full semester. The second semester of chemistry deals with agricultural problems and with foods to such an extent as to make the course practical, interesting, applicable, and of such a nature that the student will realize and connect up its relations to everyday life.

Physics has many points of interest for farm boys. The course in electricity is made especially strong.

The study of plant husbandry the first semester of the third year in high school gives much more satisfactory class work than if placed earlier in the course. This is due to the previous preparation in science, especially in botany.

Cooking and sewing are taught in the seventh and eighth grades. Practical usable things are made. The girls are encouraged to apply the problems at home. Lessons of economy are taught in both cooking and sewing.

The domestic-science teacher in a rural community must have her subject well in hand to be able to lead in her work, as she will be called upon to do a broader work than merely teach her class. If she is the very best, she will feel this herself. Country women, especially in communities so far in advance of the average as to have a consolidated school, are very able and well informed. The domestic-science teacher should be able to cooperate with them and lead in their work in the community. A girls' home-economics club to connect up the school and the home is of help. Such a club has been formed here. This club has been useful in making money, in providing socials, and in serving luncheons at different times to the school board and members of the community.

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INDEX.

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- Arizona, consolidation and transportation, legislation, 35; consolidation of schools, 16.
- Arkansas, consolidation and transportation, legislation, 35; consolidation of schools, 16-17, 87-89.
- Bibliography, 101-104.
- Bond, J. L., Moro consolidated school, Arkansas, 87-89.
- Burnham, Ernest, The Comstock consolidated school, Michigan, 78-80.
- Burns, C. C., Agriculture and domestic science in the Harlem consolidated school, Illinois, 97-99.
- California, consolidation and transportation, legislation, 35; consolidation of schools, 17.
- Canada, Macdonald consolidated school movement, 89-96.
- Centralization of schools, use of term in Ohio, 5.
- Classification of pupils, 61.
- Claxton, P. P., on consolidation of schools, 6, 68-69.
- Colorado, consolidation and transportation, legislation, 35; consolidation of schools, 17; transportation of pupils, 52-53.
- Comstock consolidated school, Michigan, history and work, 78-80.
- Concord consolidated school, Massachusetts, early history, 9-10.
- Connecticut, consolidation and transportation, legislation, 35; consolidation of schools, 17; consolidation of schools of Southington Township, 7; transportation to school, 49-50.
- Consolidation of schools, educational advantages, 58-70; cost, 55-58; first in the United States, 7; meaning of term, 5; socializing influences, 65-67; types, 70-89.
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- Domestic science, instruction, Harlem consolidated school, Illinois, 97-99.
- Driver, L. L., on high school departments in consolidated schools, Indiana, 65.
- Drivers, school conveyances, 45-46, 53-54.
- Eaton, W. L., on consolidation of schools in Massachusetts, 10-11.
- Eggleston, J. B., on transportation in Virginia, 48.
- Farragut School, Concord, Tenn., socializing influences, 66-67.
- Florida, consolidation and transportation, legislation, 36; consolidation of schools, 17.
- Gaither, R. F., on consolidation in Kentucky, 59; on the work of the Mays Lick consolidated school, Mason County, Ky., 74-78.
- Garfield consolidated school, Washington, history and work, 84-87.

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- Graham, A. B., on consolidation of schools in Ohio, 13; on transportation in Ohio, 50.
- Guelph, Ontario, consolidated school, 94-95.
- High schools, courses of study, 64-65.
- Hillegas, M. B., on consolidation in Vermont, 59.
- History and extent of the movement, 5-26.
- Idaho, consolidation and transportation, legislation, 36; consolidation of schools, 17.
- Illinois, consolidation and transportation, legislation, 36; consolidation of schools, 17-18, 56-57, 97-99; transportation to school, 48-49.
- Indiana, high school departments in consolidated schools, 65, 64; classification of pupils, 61; consolidation and transportation, legislation, 36; consolidation of schools, 13-15, 18, 57-58; transportation to school, 44, 50-51, 53.
- Iowa, consolidation and transportation, legislation, 36-37; consolidation of schools, 18, 55-56; transportation of pupils, 51.
- Kansas, consolidation and transportation, legislation, 37; consolidation of schools, 19.
- Kentucky, consolidation and transportation, legislation, 37; consolidation of schools, 7, 19, 59, 70-78.
- Lane, C. H., Macdonald consolidated school movement, 89-96.
- Larson, W. E., The Port Wing consolidated school, Wisconsin, 80-82.
- Legislation, State, concerning consolidation and transportation, 26-43.
- Louisiana, consolidation and transportation, legislation, 37; consolidation of schools, 7, 15-16, 19; transportation of pupils, 51-52.
- McDonald, N. C., on consolidation of schools, 69.
- Macdonald consolidated school movement, Canada, 89-96.
- Maine, consolidation and transportation, legislation, 37; consolidation of schools, 19-20.
- Maryland, consolidation and transportation, legislation, 37; consolidation of schools, 20.
- Massachusetts, aggregate cost of conveyance, 12; consolidation and transportation, legislation, 38; consolidation of schools, 7-9, 11-12, 59.
- Mays Lick consolidated school, Mason County, Ky., history and work, 74-78.
- Michigan, consolidation and transportation, legislation, 38; consolidation of schools, 20, 78-80.
- Minnesota, consolidation and transportation, legislation, 31-34, 38; consolidation of schools, 15, 20-21.
- Mississippi, consolidation and transportation, legislation, 38; consolidation of schools, 21-22, 82-84.
- Missouri, consolidation and transportation, legislation, 38; consolidation of schools, 22.
- Montague consolidated school, Massachusetts, 8-9.
- Montana, consolidation and transportation, legislation, 38-39; consolidation of schools, 22.
- Moro consolidated school, Arkansas, history and work, 87-89.
- Nebraska, consolidation and transportation, legislation, 39.
- Nevada, consolidation and transportation, legislation, 39.
- New Brunswick, Canada, consolidated school, 92.
- New Hampshire, consolidation and transportation, legislation, 39.
- New Jersey, consolidation and transportation, legislation, 39-40; consolidation of schools, 22-23.

- New Mexico, consolidation and transportation, legislation, 40.
- New Jersey, consolidation and transportation, legislation, 39-40; consolidation schools, 23.
- North Carolina, consolidation of schools, 6, 23-24, 55; division of time between study and recitation, 62; rural supervision, 60.
- North Dakota, consolidation and transportation, legislation, 28-31.
- Nova Scotia, school at Middleton, 90-92.
- Ohio, consolidation and transportation, legislation, 40-41; consolidation of schools, 5-6, 13, 24; transportation to school, 50, 52; use of term "centralization," 5.
- Oklahoma, consolidation and transportation, legislation, 41; consolidation of schools, 24.
- Ontario, consolidated school at Guelph, 94-95.
- Oregon, consolidation and transportation, legislation, 41; consolidation of schools, 24.
- Pennsylvania, consolidation and transportation, legislation, 41; consolidation of schools, 24.
- Phillips, E. M., on transportation in Minnesota, 46.
- Port Wing consolidated school, Wisconsin, history and work, 80-82.
- Prince Edward Island, consolidated school, 95-96.
- Recitation and study, division of time between, 61-63.
- Rhode Island, consolidation and transportation, legislation, 41; consolidation of schools, 24.
- Rhodes, McHenry. The Mays Lick consolidated school, Mason County, Ky., 70-74.
- Rockwell, Seymour, on Montague consolidated school, Massachusetts, 8.
- Routes, transportation, 45.
- Rural supervision, 60-61.
- School work, vitalizing, 63-64.
- Socializing influences, consolidated schools, 65-67.
- Smith, W. H.. The Wool Market consolidated school, Harrison County, Miss., 82-84.
- South Carolina, consolidation and transportation, legislation, 41-42; consolidation of schools, 24.
- South Dakota, consolidation and transportation, legislation, 42.
- State legislation. *See* Legislation, State.
- Study and recitation, division of time between, 61-63.
- Supervision, rural, 60-61.
- Teachers, consolidated schools, permanency of tenure, 68-69.
- Tennessee, consolidation and transportation, legislation, 42; consolidation of schools, 24-25, 55; division of time between study and recitation, 61-62; rural supervision, 60; socializing influences, consolidated schools, 66-67; transportation of pupils, 50, 52.
- Texas, consolidation and transportation, legislation, 42-43; consolidation of schools, 25.
- Transportation of children to school, early provisions for, Massachusetts, 8-9; cost, 43-54.
- Minnesota, transportation to school, 46, 48, 51.
- Union schools, North Carolina, 6.
- Utah, consolidation and transportation, legislation, 43; consolidation of schools, 25.
- Vermont, consolidation and transportation, legislation, 43; consolidation of schools, 25, 59; transportation to school, 47-48, 51.

Wagons, transportation to school, 46-48.

Washington, consolidation and transportation, legislation, 28, 43; consolidation of schools, 15, 25, 84-87; transportation of pupils, 51.

West Virginia, consolidation and transportation, legislation, 43; consolidation of schools, 25-26.

Williams, Mabel C., on transportation in Tennessee, 50.

Wisconsin, consolidation and transportation, legislation, 31, 43; consolidation of schools, 26, 80-82.

Wool Market consolidated school, Harrison County, Miss., 82-84.

Wyoming, consolidation and transportation, legislation, 43.

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- †No. 4. The elimination of pupils from school. Edward L. Thorndike.

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